REPORT RESUMES

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SOCIAL FACTORS IN THE ADOPTION OF NEW TEACHING-LEARNING TECHNIQUES IN THE ELMENTARY SCHOOL. etc ~~ACCEPTANCE OF NEW EDUCATION PRACTICES BY ELEMENTARY SCHOOL TEACHERS.~~

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THE RESPONSE OF INDIVIDUAL ELEMENTARY SCHOOL TEACHERS TO INNOVATIONS IN TEACHING DEVICES AND TEACHING MATERIALS WAS INVESTIGATED. THE GOAL OF THE STUDY WAS TO DISCOVER HOW TEACHERS PERCEIVED SPECIFIC EDUCATIONAL INNOVATIONS, AND THEIR ATTITUDES WITH RESPECT TO THE ACCEPTANCE AND USE OF THESE INNOVATIONS. PARTICIPANT OBSERVATION, INTERVIEWS, AND A QUESTIONNAIRE WERE USED TO COLLECT DATA FROM A SAMPLE OF 158 TEACHERS REPRESENTING LEVELS OF TEACHING FROM KINDERGARTEN THROUGH THE SIXTH GRADE, AND SCHOOLS IN URBAN, SUBURBAN, AND RELATIVELY RURAL AREAS. THE ROLE OF THE TEACHER WAS EVALUATED IN TERMS OF THE CLASSROOM, ORGANIZATIONAL, AND PROFESSIONAL SEGMENTS OF THAT ROLE, TERMED BY THE AUTHOR AS "ROLE SECTORS," AND IN TERMS OF THE NORMS GOVERNING PERFORMANCE IN THESE SECTORS. THE ACCEPTANCE OF NEW EDUCATIONAL DEVICES WAS REGARDED BY THE AUTHORS AS AN INSTANCE OF THE ACCEPTANCE OF CHANGE IN OCCUPATIONAL EXPERTISE, AND THE AUTHORS SUGGESTED THAT THE DEFINITION OF EXPERTISE IN THE TEACHING PROFESSION IS DETERMINED WITHIN THE SCHOOL ORGANIZATION RATHER THAN BY THE INDIVIDUAL TEACHER. IN THIS CONNECTION, IT WAS OBSERVED THAT THE TEACHER DOES NOT PERCEIVE HER ROLE AS SOMEONE WHO SHOULD OR CAN MAKE DECISIONS ABOUT EDUCATIONAL INNOVATIONS. FINDINGS SHOWED THAT MOST TEACHERS SEE ACCEPTANCE OF A SPECIFIC CHANGE AS SOMETHING CONTINGENT CHIEFLY UPON THE RELEVANT POLICIES OF THEIR ADMINISTRATION, AND TEND TO SEE THEIR OWN ROLE PRIMARILY AS THE ACT OF TEACHING, SUBJECT TO ADMINISTRATIVE CHANGE. FACTORS, OTHER THAN ADMINISTRATIVE AND ORGANIZATIONAL NORMS, WHICH APPEARED TO INFLUENCE THE TEACHERS' ATTITUDES TOWARD EDUCATIONAL INNOVATIONS WERE DISCUSSED. (JH)

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ACCEPTANCE OF NEW EDUCATIONAL PRACTICES BY ELEMENTARY SCHOOL TEACHERS

An Exploratory Study of the Adoption of New Teaching Methods

Final Report on New Media Research Project No. ORD-849
entitled
Social Factors in the Adoption of
New Teaching-Learning Techniques
in the Elementary School

David Gottlieb
Wilbur B. Brookover

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PREFACE

With few exceptions, little empirical investigation has been made into the processes by which teachers go about the business of accepting or rejecting educational innovations. For the most part, the research emphasis has been either on other content areas (agriculture and industry) or, when dealing with educational institutions, at some formal level of decision-making above that of the classroom teacher. No doubt this failure to understand the criteria by which teachers select and reject educational innovations can help to explain why numerous "pre-tested" materials are not utilized in the classroom. Despite the favorable test results of educational psychologists and the endorsements of pegagogists, we find that many potentially exciting and worthwhile educational devices are in fact not used in the classroom--or their use is so modified that the results are questionable.

The primary purpose of the research to be reported herein was to understand better the personal dynamics at play in how teachers respond to and utilize educational innovations. By "educational innovations" is meant those teaching devices and teaching materials which differ from the more familiar and traditional devices and materials found in the particular school being studied. In other words, what is perceived as an innovation will vary among schools and among teachers. At the time this research was undertaken, educational television was familiar to some teachers in all of the sample schools. At the same time, its utilization in these same schools differed. In two of the schools, educational television was, for all practical purposes, an integral part of the daily curriculum. In two other schools, plans were being made for the adoption of educational television. In the remaining four schools, there was little evidence that educational television would be utilized in the near future.

The school itself is, however, but one factor involved in identifying what is and what is not an educational innovation. Other factors are the awareness and the experience of the individual teachers. Even in those schools where educational television is available, there are teachers who perceive it as something unique since they themselves have not used it. On the other hand, there are teachers in non-using schools who have worked with educational television and hence, for them, it is "old hat." It is for this reason that, in the analysis of data, we look at the individual experiences of teachers and the experience climates of the schools.

The methodological approach used here views the teacher as the ultimate decision-maker in the use of educational innovations. This view does not mean that there is a disregard for the higher level administrators who, in fact, decide what will and what will not be purchased or brought into the local system. Our emphasis is not on the initial decision-maker and his criteria for acceptance of educational innovations. Rather, our focus is on the teacher: how the teacher responds to innovations, the individual factors and characteristics related to acceptance and use, and the structure and climate of the specific school and their impact on teacher behavior. The major focus of this research, then, is on the individual teacher in relation to the acceptance of changes in educational techniques. The teacher is viewed in terms of the classroom, the organizational, and the professional role sectors; and in terms of the norms governing performance in these role sectors.

This study is exploratory. It seeks, through the analysis of the data at hand, to develop, to modify, to expand, and to clarify an initial theoretical perspective. The working theoretical orientation, as set forth in some detail in Chapter I, was not developed a priori at the outset of the research, but emerged during the course of discussions among the authors. Throughout the report, the theoretical formulation was continually modified as alternatives were explored, abandoned, or pursued. The study is thus exploratory in the sense that an exploratory framework emerges in the course of grappling with the data; literally, during the course of exploring it for some means of understanding and explanation.

Within the appendix section of this report, the reader will find a description of the study methods employed in this research and certain characteristics of the teacher population. Appendix A deals with the selection of schools, the role of the participant observers, and the instruments used. Appendix B is a methodological note dealing with the historical development of the analytical approach used in this project.

A variety of people played a multitude of roles in the development, analysis, and writing of this research report. Since the study called for full-time participant-observers in eight different schools, it was necessary to identify four competent, energetic individuals. The task of the participant-observer is never an easy one, regardless of the research setting. Within the public school, it calls for an individual who will hold the respect and confidence of teachers as well as administrators. In addition, it calls for an individual who is both a reliable reporter of events and who has the ability not to disturb the system by his presence.

We were most fortunate in the selection of participant-observers for this project. Each observer was responsible for reporting on the informal social system of teachers, the utilization patterns of educational materials, and the classroom behavior of teachers; and for the continuous gathering of sociometric data. Each observer was assigned to two of the eight public schools in the study sample. The observers were Mrs. Sue Rice, Mrs. Ruby Jennings, Mrs. Sharon Dougall, and Miss Barbara Pinn. The authors wish at this time to acknowledge the support and the cooperation of this excellent, patient, and loyal group.

The massive task of coding the data into meaningful categories was a monumental undertaking. This work was done by Miss Sue Van Eyck, Miss Peggy Olson, Mrs. Mary Paz,, and Miss Terry Smith.

Jack Sattel fulfilled a variety of functions--ranging from data tabulation to the processing of travel vouchers.

Miss Sandra Reminga participated in both the editing and the typing of the final manuscript.

Professor Walter Stellwagen of Michigan State University gave continued and invaluable assistance. His willingness to supply highly specialized knowledge in the areas of quantitative analysis and methodology was an essential ingredient in the completion of the project.

Three graduate students served as assistant study directors in this project. Each, however, gave more of himself than one would anticipate from supposedly research neophytes. As is no doubt so often the case, these graduate students assumed responsibility for every phase of the research project. They participated in the design, in the collection and analysis of the data, and in much of the writing of this report. It can realistically be said that, without their involvement, this study could not have been completed. It is for this reason that the study directors are deeply grateful to Mr. Phillip Johnson, Mr. Joseph Smucker, and Mr. Worth Sommers.

Finally, we wish to acknowledge the splendid cooperation of the public school systems and the teachers who participated in this project.

David Gottlieb
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Michigan State University
May 15, 1966

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CHAPTER I

THE THEORETICAL PERSPECTIVE

Introduction

The conceptual framework to be used throughout this report is presented in this chapter. First, its main features are discussed in general terms. Next, a discussion of selected research findings on the acceptance of occupationally-related changes is used to illustrate its application. Finally, in the last part of the chapter, we describe how this framework may be applied to elementary school teaching.

The Theoretical Perspective

The purpose of the present study is to discover factors contributing to the acceptance of new educational practices by elementary school teachers. It is of considerable value, however, to expand this focus.[1] The determination of the generalizability and validity of empirical results is greatly enhanced if they can be formulated in terms of general theoretical variables. If results can be seen as instances of a more general theoretical position, then they reflect upon the verifiability of that theoretical position.

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[1] The reader's attention is directed to Appendix A for a discussion of the general methodological assumptions underlying this report.

What is there about either "elementary school teachers" or "new teaching practices" that would serve as a basis for such a wider theoretical perspective? To begin with, we might consider whether elementary school teachers and changing educational practices have anything in common with more general events. If we regard elementary school teachers as an instance of occupations in general, and acceptance of changing educational practices as a specific instance of the acceptance of change in general, then the original focus can be shifted to include all examples of the acceptance or rejection of occupationally-related changes in all occupations. It will be the purpose of the remainder of this chapter to attempt to formulate a theoretical perspective that is general enough to be useful in explaining the acceptance of new educational techniques and practices by elementary school teachers.

There now remains the task of selecting from within this broadened perspective variables which may hold special explanatory promise. One way of going about this is to examine existing classifications that have been found useful for other purposes. A common distinction in the literature on occupations is that found between professional and non-professional occupations. Our intent is to discover variables or factors underlying this distinction which may be useful in explaining the acceptance of occupational changes.

For most writers, occupations that are professions are those with a relatively high degree of monopolistic control over a complex body of knowledge and skill, and which possess elaborate means of propagating, extending, and maintaining it. That is, professions are notable for the very great importance placed upon what we might term *expertise*.

In the present discussion, occupational *expertise* will refer to all of the skills and knowledge which define the behavior that is central and unique to a particular occupation. It is distinguished from the skills and knowledge that function primarily to accomodate the occupation to its milieux. Thus the knowledge that doctors have of chemistry, physiology, etc., as well as the knowledge and skills directly involved in the treatment of various disorders, comprise their occupational *expertise*. The norms that govern the relationships among the doctor, his clients, his colleagues, his codes of ethics, and so forth, are regarded here as adaptive, as facilitating the practice of the *expertise*. Although there is room for debate over what portions of the entire repertoire of occupational skill and knowledge might be classified as expertise, the distinction is not entirely arbitrary. Imprecise as it may be, it will prove useful in the development of the theoretical perspective.

By the above definition, it is clear that expertise is not the exclusive monopoly of those occupations that have traditionally been referred to as professions. All occupations can be described or characterized in terms of a unique body of skill and knowledge and in terms of the norms which govern its application in varying situations. Occupations do differ among themselves, however, in the complexity of the occupational expertise and in the extent to which it is subject to modification. Thus, some occupations, for example, those usually regarded as unskilled, are characterized by an expertise which is minimal and easily acquired--frequently by relatively informal means; while others, such as medicine, law, and various occupations involved in science, possess an expertise which is by comparison enormously more complex, abstract, and specialized, and which requires a prolonged period for its acquisition and mastery, within the context of formal organizations.

The emphasis placed upon the rationalization of behavior that characterized western society increasingly finds its focus to be within the occupational expertise of what have traditionally been known as the professions and more recently within scientific and technical occupations. Greater rationalization of these occupations has resulted in increased segmentation of professional and scientific expertise, bringing about sub-specialties and the institutionalization of assessment, modification, and change. The infusion of scientific rationality into the occupational expertise of a wide variety of occupations has led to the development of occupations defined by skills and knowledge which are constantly being subjected to systematic evaluation and which are, therefore, undergoing a constant process of change and modification. Although this process is most clearly the case with the sciences, and those occupations that depend upon them in an obvious and direct way like medicine and engineering, it is also true of education where the members of numerous sub-specialties such as educational testing, educational psychology, and reading, are committed to a scientific rationalism whereby the body of expertise for those directly involved in the process of teaching is expanded and developed. Still other sub-branches, such as educational administrators, if not directly based upon science, are nonetheless heavily committed to other rational procedures, such as advanced planning, or accounting, for the achievement of coordination and efficiency in the educational enterprise.

The occupational expertise of elementary school teachers is thus subject to more or less constant changes and developments which occur in the course of a fairly persistent pursuit of some "best" set of techniques of instruction. While teachers may have little or no direct part in this development, the skills and knowledge which they acquire as they earn teaching certificates are the direct outcome of such an effort by others.

Occupations then can be seen to vary in the extent to which change is involved in their occupational expertise, and as to whether they are recipients of a ready-made expertise or are more directly involved in its formulation and development.

In addition to being closely tied to a complex and changing expertise, those occupations traditionally known as professions have also been thought notable for the degree to which they are organized and structured. For each profession there are innumerable associations catering to a wide diversity of special interests. They represent the professions in their transactions with other organized segments of the society, and in the transmission, maintenance, and spread of the professional expertise. But, as in the case of expertise, professions differ from other occupations only in degree. Obviously, all occupations are organized and structured, although they differ in the extensiveness of the structuring, in the relative amounts of formal and informal structuring, and in the manner in which occupational expertise and other norms are distributed throughout the structure.

The organization or structuring of occupations can be viewed from two related perspectives: the sociological and the social psychological. From the sociological perspective, the structure of an occupation includes all of these formal and informal groups, identifiable by an outside observer, that are relevant to the functioning of the occupation. For example, some of the formal groups relevant to elementary school teaching include the administrative structure of the state and of the local school system--including the elementary school and classroom units. In conjunction with this formal administrative structure are the various national, state, and local teachers associations--branches of the NEA and AFT, organizations which focus upon special interests, or subject areas, as well as the ubiquitous PTA. Within both of these frameworks are found many additional groups, curricula committees for example, whose existence may depend upon meeting administrative contingencies that arise only intermittently. Along with this proliferation of formally-organized groups are found numerous informal patterns of association within or outside of the formal system--cliques, friendship groups, patterns of advice seeking--which emerge and persist for varying lengths of time and have a significant impact upon the functioning of the occupation.

All such formal and informal groups can be seen to bear unique relationships to the expertise of the occupation. For example, some are more directly involved than others in the maintenance, creation, dissemination, or use of expertise, while some are involved more than others in relating the expertise to the situation or to context in which it operates.

Radically different from the structure of occupations as defined by the existence of distinguishable formal and informal groups in the sociological sense, is the structure as defined by a consideration of the perspective of the members of the occupation. From this social-psychological perspective, group membership is defined in terms of such factors as an individual's identification with an occupation, or the significance of some group which may or may not exist from a strictly sociological perspective. It has become fashionable to speak of such groups as reference groups[1] but because of the terminological confusion which has come to characterize the use of this concept we shall instead speak in this report of degrees of commitment to groups.

By the degree of commitment to a group, we shall mean the degree of importance that an actor places upon the norms of a group in determining his own behavior. Since there are a number of groups that are relevant to an occupation, there are a number of possible patterns of group commitment. It is not necessary, of course, that the groups to which one is committed should also be those in which an actor participates in a sociological sense.

---

[1] For the development and use of the reference group concept, see Samuel Franklin Sampson, "A Historical Review and Critical Appraisal of the Reference Group Concept in Psychology and Sociology" (Master's Thesis, The University of Oklahoma Graduate College, 1961).

Consideration of the consequences of the various *patterns* of commitment to groups is a fundamental issue in sociology and social psychology. It achieves its greatest emphasis perhaps in the general area of role-conflict to which we shall turn at a later point in this chapter. Substantively, the issue is raised in discussions of socialization, stratification, role, and reference group theory; and in the literature about the problem of professionals in bureaucratic settings which we shall now consider. Our aim, as we examine this material, will be to extract from significant examples some notion of the kinds of commitment patterns to be found in occupations with two major structures: the bureaucratic and the professional. In the discussion that follows we have relied on Kornhauser's[1] excellent summary of this research.

It appears that the relationship between the professional and bureaucratic structures has been approached from the social-psychological perspective in terms of differential commitment, identification, loyalty, reference group preference, and so on. Without attempting to demonstrate the point by means of the detailed analysis that it would require, it appears that all of these terms can be subsumed under the previously broadly defined concept of commitment. The following simple paradigm, adapted from Kornhauser,[2] represents a patterning of commitment to bureaucratic and to professional structures that has been found repeatedly in empirical studies.

	Professional	
Bureaucratic	Committed	Uncommitted
Committed	Type III	Type II
Uncommitted	Type I	Type IV

Figure 1. -- Patterns of Professional and Bureaucratic Commitment.

---

[1] William Kornhauser, *Scientists in Industry: Conflict and Accomodation* (Berkeley: University of California Press, 1962).

[2] *Ibid.*, p. 121.

The types represented by this paradigm are characterized well by Reissman.[1]

> Type I, Functional Bureaucrat. -- One who is oriented towards, and seeks his recognition from, a given professional group outside of rather than within the bureaucracy . . . . He is active in his professional societies and seeks appreciation and recognition on the basis of his professional specialities.
>
> Type II, Job Bureaucrat. -- He is immersed entirely within the structure. Professional skills only provide the necessary entrance qualifications and determine the nature of the work to be done. He seeks recognition along departmental rather than professional lines.
>
> Type III, Specialist Bureaucrat. -- Though he resembles the first type in his professional orientations, he exhibits a greater awareness of, and identification with, the bureaucracy. He seeks his recognition from the department and the people with whom he works rather than from like-professionals who are privately employed.
>
> Type IV, Service Bureaucrat. -- He entered civil service primarily to realize certain personally-held goals which center about rendering service to a certain (nonprofessional) group. The bureaucracy offers a framework through which he can best function, and his task is one of utilizing that mechanism to achieve his goals.

While there is good evidence that these types are fairly common for professions with strong occupational identities, they are probably also representative of any occupation in which a highly specialized expertise is practiced within an organizational context. Occupations with two clearly defined structures, one centering around the development and maintenance of expertise and the other around an administrating context, would tend to be the ones in which something like each of the four alternatives described above would be most likely to occur. Yet the application of the paradigm can be made even more general so as to represent patterns of commitment to any number of sub-structures, or sets of sub-structures, of an occupation. To the extent that the sets differ in their relationship to the occupational expertise, knowledge of the varying patterns of commitment should explain a good portion of individual acceptance of changes in that expertise. In this connection it would be particularly relevant to consider the character and the distribution of norms favoring or opposing changes in expertise within the structure of the occupation.

---

[1] Leonard Reissman, "A Study of Role Conceptions in Bureaucracy," Social Forces, XXVII (1949), 305-310. Quoted in Ibid., p. 118.

It is reasonable to suppose that every change that could conceivably be made in the expertise of an occupation would not be perceived by the members of that occupation as having an equal effect on the existing norms of the occupation, including those norms that govern the expertise. It is likely that some changes would be perceived as altering or disrupting these norms more than others. Another way of saying this is that a change will be perceived by the members of the occupation as more or less compatible with these norms. We might think of a change or event as being compatible with the norms of an occupation to the extent that it is perceived as falling within the boundaries or defined limits of these norms, and as incompatible to the extent that it is disruptive of these limits. Compatibility is an important factor in explaining the acceptance of change since, everything else being equal, the greater the compatibility between a change and a given set of norms the greater is the likelihood of the change being accepted. Any number of factors may determine the legitimate boundaries of norms governing behavior within an occupation, and these factors will vary from occupation to occupation. In some, the limits of either the boundaries or the specification of the content may be implicitly understood among the members or, as is frequently the case in large organizations, at least partially formalized in explicit rules and regulations. It should be clear that there can be as many causes of perceived compatibility or incompatibility as there are boundaries for a change to fall within or to disrupt.

As we have defined commitment it includes both the degree of adherence to behavior defined by norms and the importance placed upon these norms by an actor. Thus, the extent to which a change is disruptive of norms depends in part upon the actual boundaries or content of these norms and upon the degree of commitment to them. Acceptance of a change is thus seen to depend upon the compatibility which an actor perceives between that change and norms to which there is commitment. Letting the greatest acceptance of a change be represented by (++) and the least acceptance by (--) this relationship can be represented by the following paradigm.[1] For later reference, it will be noticed that the paradigm represents compatibility as theoretically having a greater impact upon the acceptance of change than commitment.

		Commitment	
		Hi	Lo
Compatibility	Hi	++	+
	Lo	--	-

Figure 2. -- The Effect of Commitment and Compatibility upon Acceptance of Change.

Included in the norms governing an occupation are those which apply more or less directly to changes in the expertise of that occupation. Among the most important of these are rational procedures for changing and transmitting expertise or norms. The chance that a change will be perceived as compatible or incompatible by members of an occupation would probably depend to a large extent on the presence or absence of just such norms. Thus, one occupation might view changes in expertise as a violation of divinely-ordained principles and therefore as incompatible, while another occupation might view any change in their expertise that resulted from the application of scientific techniques as compatible.

Knowledge of the distribution of which norms specifically relate to changing the expertise of an occupation would go far toward anticipating where, within the structure, a potential compatibility or incompatibility with some change might arise. Similarly, knowledge of different patterns of commitment to that structure aid in explaining differential acceptance or rejection of a change by members of an occupation who may occupy similar locations within the structure.

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[1] The paradigm is simplified for illustrative purposes. It would be closer to actual conditions to regard commitment and compatibility as two separate continua rather than as dichotomies.

In summary, in our development of a theoretical perspective, we have discussed the following points:

1. Occupations differ in the extent to which change is implicated in their expertise.

2. Occupations differ in the nature of their structure, that is, in the characteristics of both formal and informal organization within the occupation. In particular, the structure is differentiated with respect to its normative function in creating, preserving, and transmitting expertise.

3. Even when they occupy identical sociological locations within the occupational structure, individuals have differing patterns of commitment to that structure.

4. Changes in occupational expertise will be perceived by occupational incumbents as being relatively compatible or incompatible with the norms of the occupation.

5. Acceptance of a change in occupational expertise is a function of (a) the perceived compatibility or incompatibility between that change and norms, and (b) the degree of commitment by the actor to those norms.

Briefly we should be able to explain the acceptance of a change (1) by knowing the location of norms within the structure of the occupation, (2) by knowing the pattern of commitment to that structure, and (3) by showing that the change is compatible or incompatible with these norms. Thus stated, however, the theoretical perspective is incomplete for it presupposes that some of the data entering into the "theory" are either given or previously explained. For example, the perspective does not attempt to explain (a) why a particular pattern of commitments emerges in any given occupation, (b) why commitment is made to one portion of the structure rather than to another, or (c) why the norms that govern expertise are distributed as they are throughout the structure of an occupation. Where feasible, however, we shall attempt to offer such explanations for the case of the elementary teacher throughout the report.

We now turn to a consideration of some studies that deal with the acceptance of change. An attempt will be made to demonstrate how findings from these investigations fit into the present framework. Following this, the model will be applied more specifically to the public elementary school teacher.

Application of the Theoretical Perspective to Selected Research

Investigations of the acceptance of occupationally-related changes have been most numerous in the literature on the diffusion of innovations. As a result, we shall pay particular attention to these studies. It should be pointed out that we can only indicate how the perspective can be applied to this material. We cannot, of course, prove that the perspective fits, nor is that our intent. We hope only to suggest its possible utility as a means of organizing the results of a variety of investigations into a common framework, revealing thereby similarities that might otherwise be less apparent. We also hope to establish an evidential base for the analysis of the acceptance of change by public elementary school teachers.

The results of a great number of innovation and diffusion studies have been summarized and organized by Everett Rogers.[1] His generalizations of the findings from these studies are subsumable under the present framework. In the pages that follow, we will be able to indicate this correspondence in only a general way, and only with respect to some of the issues considered by Rogers.

Innovation and diffusion studies, because they deal with the rate of acceptance of occupationally-related changes, fall within the broad theoretical perspective which we have been attempting to develop. It is not just the acceptance or rejection of some change in expertise that is at issue in these studies, but the relative time lapse between the initial introduction of an innovation and its eventual adoption. Based upon the relative length of time before they have adopted an innovation, Rogers has arbitrarily classified individuals into five adopter categories. In his study, he dealt with farmers and their adoption of changes. In order to indicate how innovation studies fit the present theoretical perspective, we shall have to show that individuals in these adopter categories are (1) differentially committed to structures within the occupation of farming, (2) that the norms which govern behavior within the structures vary according to the extent to which changes in expertise are implicated in them, and/or (3) that the structures themselves differ in the function which they perform relative to the occupational expertise of farming, that is, in the creation, maintenance, or dissemination of the expertise.

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[1] Everett M. Rogers, Diffusion of Innovations (New York: The Free Press of Glencoe, 1962).

From material presented by Rogers, there appear to be two principal dimensions along which the occupation of farming is structured. One dimension is linked with a socio-economic hierarchy, and the other is associated with organizations that have an important relationship to occupational expertise but which are more or less peripheral to actual farming operations.

As evidence of the hierarchical structuring, we cite Rogers' observation of the close relationship between the early adoption of an innovation, and greater wealth, and higher social status.[1] In addition, with the exception of the very first to adopt (the innovator), the earlier that a farmer adopts an innovation the greater is the likelihood that he will also be an opinion leader. There is also evidence that informal structures, cliques, and patterns of influence, tend to follow this socio-economic hierarchy. Because of this tendency of farmers to associate with other farmers who are similar in such important characteristics relevant to the actual farming operation, we can also assume that the norms that they share in respect to changes in expertise are also similar within levels of the hierarchy but somewhat dissimilar from level to level--hence the differential rate of adoption. This relationship is not clear-cut however. The farmer is a "free-agent" in the sense that the decision to adopt or not to adopt is his own and not that of a larger organization of which he is a member. Many decisions to adopt involve economic considerations. An innovation is supposed to make farming better in some sense--more economical and efficient. But innovations also hold the threat of risk, and it is precisely the wealthy, large, highly-specialized, operator who is in the best position both to absorb such possible risks and to anticipate and therefore to avoid them. In this sense, the socio-economic dimension of structuring is related to the possibility of the disruption of the boundaries or of the content of norms governing the occupation, that is, to the possibility of an adoption being incompatible with these norms. Thus being high on the socio-economic dimension serves both to define norms favoring the acceptance of agricultural improvements, and to form a base against which innovations are differentially compatible or incompatible.

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[1] Ibid., p. 72.

The other principal dimension along which the structure of the occupation of farming is defined is closely linked to the first. Some farmers also have commitments to formal organizations composed not just of other farmers but of individuals who are directly involved in the modification or in the dissemination of occupational expertise as well. Agricultural scientists in universities and state agricultural agencies follow norms of scientific rationality and seek improvements in agricultural expertise.

County extension agents function to disseminate these modifications, believing them to be legitimate and worthy of adoption by farmers. Contact with these organizations, either directly or indirectly, is greatest at the top of the socio-economic hierarchy and is apparently negligable at the bottom. We are thus presented with a picture of farming, admittedly oversimplified, in which those first to adopt are (1) committed to structures whose norms favor changes in agricultural expertise, (2) where the potential incompatibilities of these changes is minimized by their financial resources, and (3) farmers who have greatest commitment to organizations directly involved in the creation and dissemination of changes in agricultural expertise.

The five adopter categories discussed by Rogers are: innovators, the first 2.5 percent to adopt; early adopters, the next 13.5 percent; early majority, the next 34 percent; late majority, the next 34 percent; and the laggards, the remaining 16 percent who are last to adopt.[1] The various patterns of commitment among farmers to different informal groups and to formal agencies and organizations associated with agriculture will be illustrated by applying them to only the innovators, early adopters, and laggards.

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[1] Ibid., pp. 161-162.

A number of Rogers' conclusions would seem to support a view that the innovators tend to be committed to formal and informal structures within the occupation of farming whose norms favor innovation and which function to create or change expertise and to disseminate it. They appear also to have at the same time relatively low commitment to much of the local community structure. Thus, by way of example, Rogers notes that innovators:

> . . . travel widely and are interested in affairs beyond the boundary of their social system.[1]
>
> . . . have more direct contact with scientists . . . and have more favorable attitudes toward scientists than do laggards.[2]
>
> . . . are often regarded by their neighbors with disrespect . . . but are impervious to group pressures from their neighbors . . . and receive group support for their ideas from another source. While their neighbors are relatively unimportant for them as a reference group . . . innovators belong to a cosmopolite clique whose norms favor innovativeness. The reference groups provide consensual validation for the innovator and give him psychological support with which to combat criticism from his local social system.[3]

Early adopters appear to be similar to innovators in commitment to formal external structures, but dissimilar in having a higher commitment to the local structure. They are characterized by Rogers as having:

> . . . greater contact with county extension agents than any other adopter category, including the innovators.[4]
>
> . . . greatest opinion leadership of any category in most social systems . . . [and as being] regarded by many others in the social system as a role model.[5]

Laggards, those last to adopt an innovation, appear to be uncommitted to any external structures, and to be committed to only a very narrow range of informal structures whose norms tend to emphasize the importance of traditional expertise. Rogers describes them as:

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[1] Ibid., p. 183. [2] Ibid., p. 181. [3] Ibid., pp. 204-205.

[4] Ibid., p. 181. [5] Ibid., p. 184.

> . . . semi-isolates who had relatively little interaction within or without their social system.[1]

> . . . overconform[ing] to traditional ideas to such a degree that they are perceived as deviant.[2]

Research on the diffusion of new drugs and medical practices among physicians reported by Coleman, Katz, and Menzel,[3] and Menzel[4] supply additional evidence of the general applicability of our conceptual perspective. Coleman et al reports that doctors who were integrated into the local medical community adopted a new drug more rapidly than those less integrated. In another article, Menzel attempts to reconcile this finding with the commonly-made generalization that innovators are marginal to their culture, that they are thereby either "emancipated from local norms, or are exposed to new ideas." He notes that the finding becomes consistent with this generalization when the existing norms are considered: " . . . emancipation is relevant to adoption of innovations only so long as it can be assumed that innovators constitute a deviation from exisiting norms," and he concludes that since the norms of the medical profession favor innovation, integration of the actor in the group is conducive both to the acceptance of these norms and to communication of new medical knowledge.[5] If we regard "integration" within the local medical community as a special case of commitment to the local medical community then this interpretation is consistent with our perspective.

Menzel argues further that emancipation from local norms or values becomes relevant to the adoption of an innovation when the innovations themselves differ in the extent to which they "conform" to, or in their adoption, would require "emancipation" from local norms. Putting this into the terminology that we have been developing is to say that such changes differ in the degree to which they are compatible or incompatible with these norms.

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[1] Ibid., p. 184. [2] Ibid., p. 197.

[3] James Coleman, Elihu Katz, and Herbert Menzel, "The Diffusion of Innovations among Physicians," Sociometry (December, 1957).

[4] Herbert Menzel, "Innovation, Integration, and Marginality" (American Sociological Review, October, 1960), pp. 704-713.

[5] Ibid., pp. 707-708.

Menzel then sets forth a number of assumptions about the kinds of innovations that would require emancipation from local norms, and the social positions that are most likely to receive communications about innovations or be emancipated from local norms. From these he deduces and tests a number of hypotheses that relate characteristics of innovations and emancipation from local norms to the acceptance of innovations. However, we are concerned here not with his findings or his conclusions but with a key assumption in the development of his argument that reflects upon our earlier discussion of patterns of commitment. Menzel assumes that doctors who interact or who have interacted in the past within the medical profession, but outside their present community, will also be emancipated from the local norms. In the terminology of our present perspective, he is assuming that a particular pattern of commitment obtains for doctors--that commitment to the structure of the occupation outside the local medical community implies a lack of commitment to the local structure. But in view of the patterns of commitment that were seen typically to characterize professionals in bureaucratic settings, as well as in the complex commitments of farmers, and in consideration of the importance of both the local and non-local structure in the

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[1] This assumption is stated in the following two hypotheses: " . . . (5) physicians' current interaction with the medical profession outside their own community will promote their exposure to communication, their emancipation [from local norms] and their assurance; (6) physicians' past interaction with the medical profession outside their present community will promote their emancipation from local norms and their assurance." (Ibid., p. 709.)

Its appearance here is curious in view of a remark that occurs earlier in the article, " . . . correlation between . . . [contact with foreign ways and poor integration in the home society] should not be taken for granted. Nor should it be assumed a priori that . . . [they] are negatively correlated." (Ibid., p. 705.)

medical profession, we should expect that a certain number of physicians would be committed to both the local and non-local structures of the medical profession.

In fact, there is some evidence that it is just such a joint commitment that affects early acceptance. In the previously referred to article by Coleman, Katz, and Menzel, it was found that those doctors who adopted "gammanym" early were "integrated"[1] into the informal structures of "advice" and "discussion." Those who adopted later were integrated somewhat less well into these structures, and more into the "friendship" network. Those who adopted much later apparently were poorly integrated into any of these informal structures. Furthermore those doctors that were identified as having a professional orientation[2] adopted earlier than those not so identified, and were presumably also integrated into the "advice" and "discussion" structures. Evidence presented by Menzel[3] also indicates that early adoption of gammanym was associated with integration into the three structures, and with attendance at professional meetings. By inference, it would thus appear that early adoption of gammanym is associated with (a) integration into, i.e., commitment to, the informal structures of the local medical community--particularly for "advice" and

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[1] Integration-choosing or being chosen by others with respect to advice, discussion, and friendship can be subsumed under the previous definition of commitment. The three relevant socio-metric questions asked: "To whom did he most often turn for advice and information? With whom did he most often discuss his cases in the course of an ordinary week? Who were his friends among his colleagues, whom he saw most often socially?" (Coleman, Katz, and Menzel, op. cit., p. 254.)

[2] Defined by the rank importance that a doctor assigned to the following characteristics in "recognizing a good doctor in a town like this":

"a. The respect in which he is held by his own patients.
"b. His general standing in the community.
"c. The respect given him by his local colleagues.
"d. The research and publications he has to his credit."

Tending to trust "professional criteria," (c) and (d) in the assignment of esteem, designates a professional orientation. (Ibid., p. 255.)

[3] Menzel, op. cit., p. 711.

"discussion," (b) commitment to a special set of norms as reflected in a "professional" orientation, and (c) commitment to at least one outside medical group as indicated by attendance at medical meetings. This is not to say that the acceptance of every medical innovation would behave in precisely this manner. In fact, we have attempted to reinterpret only a small portion of Menzel's findings and have questioned only one of his assumptions.[1] In order to know if it would be possible to explain the remainder of Menzel's findings within the current framework, a great deal of additional information would be required. We would have to know the nature of the norms within the medical structure in more detail, the perception by doctors of the other innovations investigated by Menzel, as well as the existing patterns of commitment to these structures.

These two studies of diffusion among doctors and the materials on innovation in agriculture indicate that the structure of occupations relevant to the acceptance of changes in expertise may be extremely complex. It includes not only the innumerable formal organizations, with all of their subdivisions, but also a wide variety of informal structures or groupings. Thus, for example, it was seen that there is not just one local medical community or structure with norms generally favorable to the acceptance of change, but at least three, each with somewhat different norms--a "discussion," an "advice," and a "friendship" network. Commitment to these had an impact upon the acceptance of a change at different times in the diffusion process. However, they affected only one aspect of the acceptance of an innovation, the rate of adoption. Were we to define a doctor's acceptance in terms of the relative extent of use of a drug, then other structures, patterns of commitment, and norms might be relevant.

From the above considerations, what in the structure of an occupation is most relevant to the acceptance of a change in occupational expertise is apparently not simply a given or even obvious. It depends, in part, upon what at any time the investigator assumes to be important. There is probably a tendency to analyze "the obvious" structure of an occupation, until such time as empirical investigation compels a consideration of more "relevant" structures. Witness the "discovery" of informal groups in industrial settings and the relevancy of informal channels of information and influence in "mass" communication. Discovering those groups or that structure within an occupation that are most relevant for the acceptance of change has and will doubtless remain problematical, and a crucially significant theoretical and empirical problem.

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[1] However, were Menzel to regard commitment to local and non-local medical structures as problematical rather than as given, the deduction of some of his hypotheses would necessarily be altered. This in itself could possibly help account for some of the unexplained variation he finds associated with the mechanism, "emancipation."

The occupations of farming, medicine, and professionals in bureaucracies share certain characteristics: (1) individuals within them possess a relatively high degree of freedom in deciding whether to adopt a change in their expertise, and (2) the structures relevant to these occupations to which commitments are established are fairly diverse and widespread. Nothing yet has been said of commitment patterns in occupations with structures that are less open and less varied than the professions or farming, or where adoption of changes is not simply a matter of free choice. What of white and blue collar jobs where work is performed under circumstances that are far more circumscribed; where the relevant structure of the occupation consists, to a large extent, of the employing organization which, in turn, determines the content of the expertise?

In contrast to farming and the professions, the average blue or white collar worker has far fewer opportunities to be committed voluntarily to groups within his occupation that differ substantially in their norms or functions with respect to his occupational expertise. In the paradigm referred to earlier on page 6, these occupations closely approximate the Type II Job Bureaucrat. The expertise that defines the content of the job of the bureaucratic employee is created or modified within the bureaucratic structure in accordance with formal administrative rules. In such a setting, the creation and definition of the expertise may be so completely the task of others that experience and skill may be irrelevant to performance, and modification of the expertise by those that perform may be completely precluded. Holding a job in such an organization necessarily implies that there be commitment to the jurisdiction of others over modification of expertise. However, complete commitment to the formal rules governing the expertise is not guaranteed, as the frequently-observed tendency of informal groups to modify or to set production standards in opposition to such rules amply attests.

There exists a well-developed literature on the substructures of occupations found in formal organizations. On the basis of this literature, it would appear that the structures relevant to the acceptance of change in bureaucratic settings can be conveniently framed in terms of roles, role-sectors, and their horizontal, and vertical ordering. We shall undertake to do this in the last section of this chapter where the concepts of the theoretical perspective are given direct application to the public elementary school teacher.

Much of the research and theory that falls within the scope of our interest in the acceptance of occupationally-related changes has been concerned with occupations that exist in bureaucratic organizations. Because changes in expertise tend to assume a "given" rather than a "voluntary" nature within such a context, much of what has been written has been directly concerned with administrative strategies intended to promote acceptance or to reduce resistance to organizationally-sponsored changes.[1] These studies can probably be formulated so as to show that these strategies involve either increasing or shifting commitment to groups compatible with these changes or in modifying already existing norms in such a way that they become compatible with the change.

Acceptance of changing expertise has also been dealt with by investigators who have been concerned with the impact of automation upon blue and white collar occupations.[2] The results of these investigations indicate that automation is resisted when it results in a massive incompatibility with norms governing a sector of life wider than the occupation itself--as well as when it is incompatible with occupational norms. Instances of this occur when, as a result of automation, the prestige of the occupation is lowered within the organization or community; when interpersonal associations are severed; when some other established order in one's life is disrupted; or, the ultimate in incompatibility, when the occupation is abolished.

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[1] See for example, Dorwin Cartwright, "Achieving Change in People: Some Applications of Group Dynamics Theory," Human Relations, IV (1951), 381-392; Lester Coch and John R. R. French, Jr., "Overcoming Resistance to Change," in E. Maccoby, T. Newcomb, and E. Hartley (eds.), Readings in Social Psychology (New York: Henry Holt, 1958), pp. 233-250.

[2] For example, see William A. Faunce, "Automation and the Automobile Worker," Social Problems, VI (Summer 1958), 68-78; and Ida Russacoff Hoos, Automation in the Office (Washington, D.C.: Public Affairs Press, 1961).

A study by Faunce[1] of the acceptance of work-related changes within a formal organization, points to a connection between the acceptance of change and commitment to structures which exist at the societal level--as well as to the structures of the work organization. Using a scale designed to measure attitudes toward general work-related change,[2] Faunce found that "higher class background and identification," and "an urban background and more education," were associated with favorable attitudes toward change among employees of a medium-sized insurance company. He suggests that these factors may" . . . reflect differing work experiences and sub-cultural differences in both the meaning of work and the norms in terms of which change is evaluated."[3] Stating this in the terminology of our theoretical perspective, we would say that changes in general (as measured by the change scale) appear to be compatible or incompatible with norms governing work behavior derived from commitment to those subcultural or socio-economic groups associated with Faunce's measures of "class background," "urban background," and "more education."

Faunce also found that a higher position in the company was associated with a greater readiness to accept change. This he explained as being the result of a "greater likelihood of involvement in the decision-making process, or at least of identification in the decision-making process, or at least of identification with the change agent."[4] Such "involvement" or "identification" appear to be subsumable under the concept of commitment as previously defined.

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[1] William A. Faunce, "Social Stratification and Attitude Toward Change in Job Content," Social Forces (December, 1960), pp. 140-148.

[2] The change scale is the same as we shall employ--with slight modifications in wording and with a different scaling procedure. It will be discussed in detail later in the report.

[3] Ibid., p. 148. The reader is directed to the original article for a discussion of other findings which we have not attempted to include within the present perspective.

[4] Ibid., p. 148.

The Theoretical Perspective Applied to Elementary School Teachers

While the occupation of elementary school teaching bears many similarities with other occupations and professions it is uniquely different from any one of them. The behavior of the elementary school teacher is neither as autonomous as the doctor or farmer or other professionals in a bureaucratic organization nor is it as restricted as that of the typical office or factory worker. It seems unlikely that the patterns of commitment of elementary school teachers will be as clear-cut as the four types that characterized the professionals in bureaucracies referred to earlier in Figure 1. On the other hand, the teachers' commitment patterns may not be as complex as those of the farmer or doctor who were freer of formally defined organizational norms.[1] Faunce's findings, however, lead us to expect that the teachers' past and current commitments to groups associated with the different sub-structures of the society itself need to be considered as relevant to the acceptance of occupationally-related change.

In turning to the specific case at hand, it will be necessary to be more precise with respect to a number of the concepts employed in the explanatory model. The concept that appears to be most relevant to the study of acceptance of change within the occupation of elementary school teaching is "role." The term "role" will be used to designate any set of activities and orientations that are uniquely identifiable, either from the actor's or the researcher's point of view. The identification of such a set may be attributed (1) to patterns of ongoing behavior of a given social system, (2) to the individual actor's definition of a role in a given social situation,[2] or (3) to the researcher who believes that some sets of overt behavior are relevant to a particular problem.[1] We assume that our identification of roles fit all three bases of demarcation fairly well. While we have somewhat arbitrarily categorized sets of observable behavior, these can be related to the overall patterns of elementary school teaching. In large measure they seem to correspond to acts that teachers themselves perceive to be meaningful.

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[1] The actual pattern of commitment that seems to characterize public elementary school teaching as well as factors that contribute to this pattern are discussed in greater detail in Chapter IV.

[2] Linton's definition of role represents the former case, while Sargent's definition is representative of the second. For a summary discussion of definitions of the concept "role" see Neal Gross, Ward S. Mason, and Alexander W. McEachern, Explorations in Role Analysis (New York: John Wiley and Sons, 1958), pp. 11-20.

An identified role represents certain recurrent, modal patterns of behavior and thus more or less accurately describes the behavior of each individual said to occupy that role. When we speak of the norms that govern the enactment of a given role, we are referring to one or both of the following possibilities: (1) an explicitly stated formal rule which specifies the behavior or the acts that are expected of the incumbent of the role--for example, the rule which states the hours during which a teacher shall be in school; and (2) a system of knowledge, beliefs, and values which governs or directs the behavior of the individual said to occupy a given role--for example, the established expertise of a given occupation.

The link between a given role and the norms which define it is the degree of commitment of the role incumbent toward those norms. Norms indicate the objects and situations in relation to which behavior or acts are addressed by the occupant of a role. The degree of commitment of the occupant provides the means by which the norms become translated into the individual acts described as a role. Variations among individuals in their commitment to a given set of norms may result in some variation in the enactment of a given role.

In the development of our conception of the term "role" we have found it analytically useful to view it as comprised of identifiable sets and sub-sets of acts and/or orientations. A given role may thus be broken down into its "role sectors." Further, each of the role sectors comprising the more generic term "role" may be broken down into individual "acts." For our study, the role "teacher" has been broken down into three main role sectors:

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[1] Kingsley Davis has defined role as " . . . how an individual actually performs in a given position, as distinct from how he is supposed to perform . . . " in Human Society (New York: The MacMillan Company, 1948), p. 90.

(1) the classroom role sector, (2) the organizational role sector, and (3) the professional role sector.

Figure 3 illustrates the grouping of acts into the role "Sectors" and roles which will be used in this report. Certain acts -- grading papers, presenting material, etc. -- have been grouped together under the role sector, "classroom." Other acts -- teacher meetings, committee work, etc. -- have been grouped into the role sector, "organization." Still others have been grouped into the "professional" role sector. These role sectors are in turn components of the more general role, "teacher."

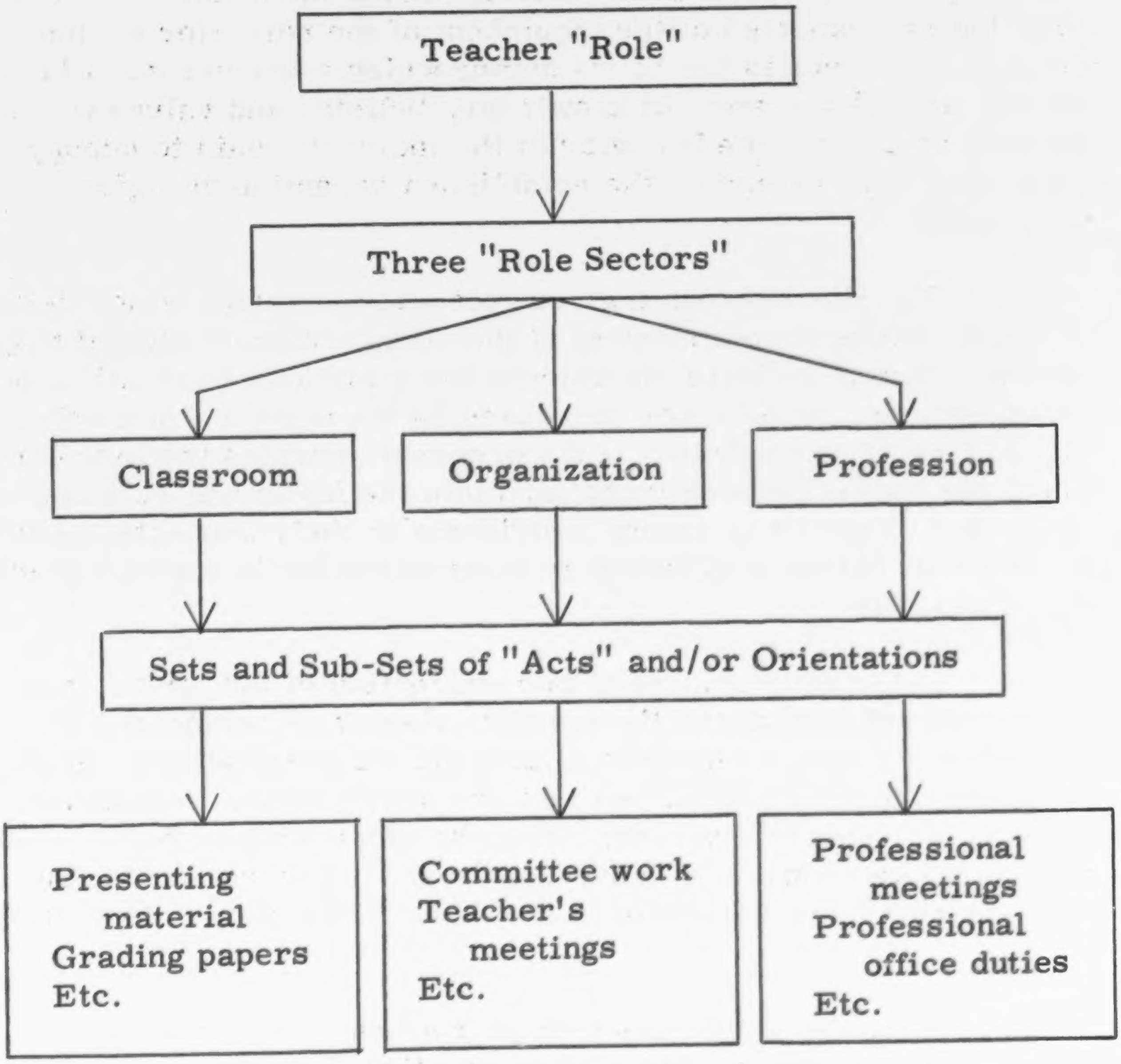
Teacher "Role"
Three "Role Sectors"
Classroom
Organization
Profession
Sets and Sub-Sets of "Acts" and/or Orientations
Presenting material
Grading papers
Etc.
Committee work
Teacher's meetings
Etc.
Professional meetings
Professional office duties
Etc.

Figure 3. -- Relationship of Acts to Role.

As illustrated in Figure 3, segmentation of the generic role, "teacher," may occur either vertically or horizontally. A vertical segmentation involves a specification of differing levels of generality, or inclusiveness, of the range of acts and their associated norms. Thus the act, "presenting materials," is less inclusive than the "classroom" role sector. The "classroom" role sector is, in turn, less inclusive than the role "teacher." A horizontal segmentation, on the other hand, involves specifying role sectors on roughly equivalent levels of generality. Thus, for example, the act, "presenting materials," has about the same range of inclusiveness as the act, "grading papers," and the "classroom" role sector is similar in its range of inclusiveness to the "organization" role sector. These two methods of segmentation have important consequences later in this report. Finally, "act," "role sector," and "role" are to be understood as relative, since they may be applied to any level of analysis, and because the same "acts" may be used to specify one or more different "acts," "role sectors," or "roles."

Commitment

For any identified role there exist norms that influence the enactment of that role.[1] Our division of roles into organizational, classroom, and professional role sectors is somewhat arbitrary. However, the role sectors, by virtue of the norms which influence the enactment of any role, are also meaningful sets of acts and behaviors for the teachers. In our analysis, we are concerned with a particular relationship between the actor, his role or role sector, and the norms governing the enactment of the role. This special relationship is expressed by our concept of "commitment." As noted previously, commitment of an incumbent refers to the relative importance placed upon the set of norms associated in a given role. A measure of commitment is the degree to which these norms are translated into overt behavior. (Viewing commitment in this manner allows us to take into account variations in role enactment while still identifying an actor as an incumbent of a given role.) For example, one teacher may place a high valuation upon the use of comparatively unorthodox methods in instructing pupils--that is, methods contrary to the form of instruction currently in vogue. Another teacher may place a high valuation upon adhering to the norms associated with his role, and may thus be extremely cautious about risking possible censure by using methods similar to the first teacher. In the first case, a high degree of commitment exists with respect to the behavior that has been translated from given norms. In the second case, a high degree of commitment exists with respect to the norms _qua_ norms.[1]

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[1] The nature of these norms may be prescriptive and proscriptive. They may be formally defined or merely consensually held.

As in other occupations, teachers are characterized by different patterns of commitment to their relevant occupational structures--in this case, to role sectors and roles. In addition to these commitment patterns, differing degress of emphasis placed upon the two principal components of commitment tend to make any complete analysis of behavior extremely difficult--particularly in a setting such as the school. It is for this reason that we have confined our attention to the three role sectors which we shall examine separately in this report. This will permit us to analyze more parsimoniously those factors influencing acceptance of change in general, and of instructional television in particular. We have done this with full realization that such an approach necessarily neglects many subtleties in the actor's role enactment which stem from various joint role sector commitments.

Summary

Our effort to develop a theoretical perspective capable of explaining the acceptance of new educational practices by public elementary school teachers was broadened to apply to the acceptance of any occupationally-related change by occupants of any occupation.

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[1] Types of role incumbent commitment may be derived by dichotomizing the two principal components and noting their relationship. The resulting types would be similar to the first four of Merton's "Typology of modes of individual adaptation." We are not attributing goal-directed behavior to the actor. See Robert K. Merton, _Social Theory and Social Structure_ (Glencoe: The Free Press, 1957), p. 140. It is important for the reader to keep in mind the two referent points of commitment. These will shift in their relevance for different sections of the data analysis.

The theoretical perspective isolated relevant variables: (a) the structure of the occupation, viewed as any formal or informal pattern of interaction, (b) the distribution of norms and functions pertaining to the occupational expertise within the structure, (c) patterns of commitment to the structure, and (d) perceived compatibility or incompatibility between the change in expertise and the structure.

The framework was then applied to selected studies on the acceptance of occupationally-related changes to illustrate its applicability over a rather broad range of occupations.

Finally, the perspective was sharpened for application to the specific occupation of public elementary school teachers. The relevant structure of public elementary school teaching was formulated in terms of role and role sectors. Commitment to this structure was defined in terms of the relative importance of actual role enactment and of the norms governing the role enactment.

CHAPTER II

ORIENTATION OF TEACHERS TOWARD ADMINISTRATIVE AUTHORITY: THE USE-ATTITUDE RELATIONSHIP

Introduction

In this chapter, we will consider the characteristic orientations of the teachers toward the organizations in which they work, particularly toward the legitimate authority in these organizations, and the teachers' roles as organizational members. Following this, a measure of the acceptance of one specific change, attitude toward instructional television (referred to hereafter as ITV), is introduced. Attitude toward instructional television is related to three separate degrees of exposure to instructional television.

The strength of the relationship between use or non-use of instructional television and attitude toward instructional television -- the use-attitude relationship -- is introduced as a "standard" relationship. That is, it will be used in subsequent chapters to test the effects of various independent variables -- such as commitment to administrative control of segments of the role behavior, and specific attributes of instructional television, and of the conditions surrounding its use -- upon attitude toward ITV.

Commitment to Administrative Authority

In the foregoing chapter, it was suggested that a factor of considerable importance in the acceptance or rejection of a change in the expertise of an occupation would be the change-relevant norms of that occupation and the level of commitment to these norms. When the norms favor changes, and when commitment to them is high, then changes will tend to be accepted. It was also suggested that, for those occupations practiced within an organizational or a bureaucratic framework, change-relevant norms would be matters of policy decision by designated officials of that organization and not, as was the case for the farmers and physicians, matters of individual decision by those ultimately most affected by the change. For teachers, as for blue and white collar employees, major changes in occupational expertise are matters of administrative policy. Hence, for such occupations, our concern shifts from the degree of commitment to norms which favor or do not favor changes in occupational expertise to the extent to which legitimate control over areas of occupational expertise is exercised by organizational authority and the degree of commitment to such authority.

To what extent are elementary school teachers committed to administrative control over areas of their professional expertise? There have been frequent suggestions in the literature that teachers may not have a great deal of influence over their own professional expertise, that they may be committed to having the administration of the school control important portions of their role behavior. It has been suggested that such an orientation toward administrative authority may stem directly from the sensitivity of public education to the demands of the lay public, a relationship which has kept control over the professional expertise of teaching out of the hands of the teachers.[1]

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[1] Illustrative of this point is the effect of public pressure upon altering educational policy as an aftermath of the launching of the first Russian satellite. Whether or not a change, in fact, was needed is not of concern here. What is important is the fact that these measures came, not from the profession, but from the lay public. See Raymond E. Callahan, Education and the Cult of Efficiency (Chicago: University of Chicago Press, 1962). For a further discussion of control of the education profession see Myron Lieberman, Education as a Profession (Englewood Cliffs: Prentice-Hall, 1960), p. 79; and Robert J. Havighurst and Bernice L. Neugarten, Society and Education (Boston: Allyn and Bacon, 2nd edition, 1962), pp. 482-483.

Along these same lines, Callahan has argued that administrators in the teaching profession have been heavily influenced by the high esteem which is placed on the business ethic in American society. Accordingly, it is suggested that they have been sensitive to pressures from business and industrial groups and that, in running their schools, they have emphasized the importance of organizational efficiency -- which, in turn, places high demands on the teachers for compliance with administrative directives.[1] Becker has suggested that teachers may have to rely upon the school organization and the principal as a "buffer" between themselves and the lay public.[2]

But whatever the reason for it, there is evidently some attempt being made to socialize the public elementary school teacher into the requirements of functioning within an organization. This is readily evident in various textbooks in elementary education which lay stress upon the importance of being a cooperative member of an organization -- in addition to being an autonomous professional. Teachers are told that they are members of one of the most important of professions, that is "one of the most challenging and demanding occupations to which may has yet addressed himself,"[3] and that upon them rests at least partial responsibility for the maintenance and improvement of society. But they are also impressed with the fact that they must cooperate with the school organization. Part of this cooperation requires the involvement of the teacher in activities designed to reduce the potential conflict between the lay public and the school organization.[1] A second part of this emphasis upon cooperation is a definition of professionalism in terms consonant with organization requirements.[2] And Terrien has even suggested that compliance with organizational expectations is also supported by and consistent with teachers placing a strong emphasis upon security in their jobs.[3]

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[1] Callahan, op. cit.

[2] Howard S. Becker, "The Teacher in the Authority System of the Public School," in Amitai Etzioni (editor) Complex Organization (New York: Holt, Rinehart and Winston, 1961), p. 246. "The principal is expected to 'back the teacher up' -- support her authority -- in all cases of parental 'interference'."

[3] Carl H. Gross, Stanley P. Wronski, and John W. Hanson, School and Society (Boston: D. C. Heath and Co., 1958), p. 1. See also Robert Ulich, Philosophy of Education (New York: American Book Co., 1961), Chapter 12, "Eight Postulates of Teaching." In an introductory text, the authors state that, "The public has come to realize that teaching is not only one of the most important of the professions from the standpoint of human welfare, but is, when properly understood, one of the most technical and difficult of all professions." See Raymond H. Harrison, Lawrence E. Gowin and Orville Goldner, The Elementary Teacher in Action (San Francisco: Wadsworth Publishing Co., 1958), p. 4.

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[1] Leo M. Chamberlain and Leslie W. Kindred, The Teacher and School Organization (2nd edition; Englewood Cliffs: Prentice-Hall, Inc., 1958). The authors point out the necessity of making parents aware of the education process by involving them in the subsidiary functions of the school. As for the community, the authors state that "All teachers should take an active part in community affairs, if for no reason other than public relations (p. 480). H. Otto Dahlke, in Values in Culture and Classroom (New York: Harper and Bros., 1958), points out that the high evaluation placed by the National Education Association upon "conforming behavior" by the teacher within the community in which she is employed (p. 402).

[2] For example, Chamberlain and Kindred, after carefully explaining the structure of a school organization, state that:

> The responsibility of each individual in the organization is to the office immediately above him and he cannot ethically take the shorter path to a higher official even though this procedure may seem to offer the best solution to his difficulty (op. cit., p. 85).

See also T. M. Stinnett and Albert J. Hugget, Professional Problems of Teachers (New York: The Macmillan Company, 1963).

[3] Frederic W. Terrien, "The Occupational Roles of Teachers," Journal of Educational Sociology, XXIX (September, 1955), 14-20. Terrien states that:

> A corollary of the emphasis on security is a desire to avoid those actions which threaten security, particularly actions which tend to 'buck the system' and pit the interests of the individual against those of the employer. As a consequence, the teachers appeared to the detached observer to support in action, if not in words, the very policies which held them, as they seem to believe, in check.

One could easily get the impression from the foregoing literature that public elementary school teachers are little more than bureaucratic functionaries, committed to norms giving administrators authority over important aspects of their professional expertise, including changes in expertise.

While there may be some truth to this view of the teacher as compliant to the organization, it would be easy to overemphasize the extent to which it is a unique characteristic of teachers or the extent to which it is true of all, or even of most, teachers. The available literature on professionals in large-scale organizations certainly suggests that all professionals are not equally oriented to the organization and to the legitimate authority of administrators.[1] Thus, we should not expect that every teacher would be equally committed to administrative control over teaching expertise -- even if that were the intention of the school administration.

An examination of some relevant data on the teachers in our sample supports this somewhat more flexible view of the professional orientations of teachers. There appear to be variations in the commitment of teachers to the authority of administrators over the professional expertise of teaching, and to the administrators as relevant "audiences of evaluation," as well as variation in the importance that security assumes in the teachers' value orientations toward their profession.

To what extent are the teachers in our study committed to legitimate administrative control over their professional expertise? When asked if they agreed with the statement that "The principal should offer constructive criticism to the teacher when she is not teaching as she should," only two teachers, of a total of 147 responding, disagreed. The teachers in our study appear to expect the principal to keep watch over their methods of teaching.

Some idea of commitment to norms governing the assignment of legitimate control over changes in expertise can be gathered from the responses of the teachers in our sample to several related questions. In interviews the same teachers were asked in reference to the introduction of technical teaching devices, such as teaching machines and ITV, "To what extent do you feel the individual teacher should determine what is introduced?" The results are presented in Table I, below.

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[1] For example, see that portion of the preceding chapter where we discuss findings which suggest that there are at least several fairly common types of orientation to large-scale organizations and to professions.

TABLE I

Teachers' Assignment of Responsibility for the Introduction of Change into the Classroom

Source of Responsibility	Teachers Replying				
	Per Cent	No.	Grouped Sources	Per Cent	No.
Individual teacher or group of teachers only	11	16	Mainly Teachers	44.1	67
Mainly teachers, but with administrative support	34	52			
Equally shared between teachers and administration	8	12			
Mainly administration, but with teacher awareness	43	66	Mainly Administration	45.2	69
Administration only	2	3			
Other	2	3			
Total	100	152		89.3	136

Of the 152 responding teachers, only 11 per cent felt that they should have sole responsibility for introducing such changes, and only 2 per cent felt that the administration should have the sole responsibility. Most of the teachers appear to favor some combination of teacher and administrative responsibility. If we collapse the "individual teacher or group of teachers only" and the "mainly teachers, but with administrative support" categories into a "mainly teachers" category, and collapse the "mainly administration, but with teacher awareness" and the "administration only" categories into a "mainly administration" category, we see that the teachers are about equally divided as to the extent to which responsibility is assigned "mainly" to teachers or "mainly" to the administration. The percentages for these collapsed categories are 44.1 and 45.2, respectively.

This pattern is modified somewhat when the teachers are asked, "To what extent do you feel that the individual teacher should determine how such a change or innovation was to be used in the classroom?" As Table II, on the next page, shows, 47 per cent of the 135 teachers that responded indicated that the individual teacher should have sole responsibility for determining how change was to be used. When this category is combined with "teachers as a group," 51 per cent, or a little over half, of the responding teachers placed primary responsibility with themselves -- either individually or as a group. Thirty-six per cent felt that such decisions should be made in cooperation with the administration, while 9 per cent placed sole responsibility upon the administration. Five per cent of the teachers answered that the nature of the innovation itself should be the primary determinant in the assignment of responsibility for how the change was to be used. Thus, by the measure of the questions used, only about 45 per cent of the teachers in our study appear to be committed to the norm of administrative control over changes in some portions of their professional expertise. Hence, there is far from a unanimous concession of authority to administrators by the teachers.

Let us now turn to some slightly different data which may cast some additional light on the range of commitment to administrative authority. Faunce has suggested that individuals will tend to be oriented to those "audiences" that are most directly involved in the evaluation of their behavior in a role and which are also in a position to bestow sanctions appropriate to that evaluation.[1] We should expect then that one important "audience of evaluation" would be the source of legitimate authority in the school, namely the principal. Another might be the parents of students, for their evaluations and expressions of satisfaction or dissatisfaction are of direct consequences to the teacher because of the close ties of the public schools with the community. Professional colleagues would be still another potential audience of evaluation.

TABLE II

Teachers' Assignment of Responsibility for How Change Is to be Used in the Classroom

Source of Responsibility	Teachers Replying	
	Per Cent	Number
Individual teachers	47	63
Teachers as a group	4	5
Teachers in cooperation with the administration	36	48
Administration, including supervisors	9	12
Depends on the change	5	7
Total	101*	135

*Rounding error.

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[1] William A. Faunce, "Occupational Involvement and the Selective Testing of Self Esteem," paper read at the annual meeting of the American Sociological Association, Chicago, September, 1959.

Data from our study tend to support the view outlined above. In the questionnaire, teachers were asked to indicate the degree of importance that they attached to being viewed as "an outstanding teacher" -- by pupils, the principal, parents, and fellow-teachers. The responses are presented in Table III, below.

TABLE III

Degree of Importance Placed upon "Being Viewed as an Outstanding Teacher" by Different Audiences of Evaluation

Audience of Evaluation	Degree of Importance								Total	
	Extremely Important		Very Important		Somewhat Important		Not Important			
	%	No.	%	No.	%	No.	%	No.	%	No.
Pupils	30	44	37	54	28	42	5	7	100	147
Principal	26	39	40	59	31	45	3	5	100	148
Parents	21	31	42	62	32	47	5	8	100	148
Teachers	8	12	27	40	50	74	15	22	100	148

Considering only the "extremely important" column, we see that pupils received the greatest percentage of responses. The next greatest percentage went to the principal, then the parents, and finally to fellow teachers, who were regarded as "extremely important" by only 8 per cent of the teachers. This same relationship holds when both the "extremely important" and "very important" categories are combined.

However, the pattern shifts when teachers are asked to indicate the degree of importance that they placed upon being well-liked. This pattern is shown in Table IV, on the following page.

TABLE IV

Degree of Importance Placed upon "Being Well-Liked" by Different Audiences of Evaluation

Audience of Evaluation	Degree of Importance								Total	
	Extremely Important		Very Important		Somewhat Important		Not Important			
	%	No.	%	No.	%	No.	%	No.	%	No.
Pupils	27	39	45	66	27	39	2	3	100	147
Teachers	21	31	44	65	34	50	1	2	100	148
Principal	17	25	41	60	39	57	3	5	100	147
Parents	14	20	44	65	36	53	6	9	100	147

While the greatest percentage of "extremely important" responses remained with the pupils, fellow teachers receive the next greatest percentage. The percentages for "principal" and "parents" were lower. This pattern remains when the "extremely important" and the "very important" categories are combined.

The relatively high importance given to pupils, both for being an "outstanding teacher" and for "being well-liked," is not surprising. Pupils are the audience with which the teachers have the most direct and prolonged contact. Their responses are likely to be the most immediate confirmation both of how well the teaching role has been carried out and of how "likeable" the teacher is. The greater importance that teachers placed on being evaluated as "outstanding teachers" by the principal than by fellow teachers suggests that primary importance for the evaluation of expertise is placed upon the principal rather than upon their professional peers. Fellow teachers seem to be more important for camaraderie.

Teachers' attitudes towards parents, who are more remote from the school system, are more likely to be concerned with parental evaluations of the teachers' role enactment rather than with being well-liked personally.

Thus, once again, we see that there is a variety of teacher orientations to the school organization. Just as there was a range of commitment to norms governing the scope of administrative authority over professional expertise, so there is a range to the teachers' commitment to the administration as an audience for the evaluation of their teaching performance.

Finally, let us examine the value orientation that the teachers in our study have toward their occupation. The teachers were asked to indicate which of fifteen "job characteristics" they regarded as "extremely important." These "value" items, some of which were adopted from Rosenberg,[1] are listed in Table V, on the next page.

Those values most frequently chosen by the teachers as extremely important were: (A) a stable, secure future; (C) an opportunity to use my special aptitudes and abilities; and (D) an opportunity to be helpful to others. Least frequently chosen were: (F) a chance to exercise leadership, (G) social standing and prestige in my community, (K) a chance to achieve recognition from others in my field, and (L) freedom from supervision in my work.

While the following table gives us an indication of what is and what is not likely to be viewed as extremely important, we also want to note the interrelationships existing among these values. A non-metric, multi-dimensional scaling technique developed by Coombs[2] enables us (1) to extract common dimensions underlying

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[1] Morris Rosenberg, Occupations and Values (Glencoe: The Free Press, 1957), pp. 10-13.

[2] For a complete description of the method, see Clyde H. Coombs, A Theory of Data (New York: John Wiley and Sons, 1964), Part Five: "Similarities of Data," pp. 431-495. See also John L. Rinn, "Group Behavior Descriptions: A Non-Metric Multi-dimensional Analysis," Journal of Abnormal and Social Psychology, LXVII, 2 (1963), 173-176.

TABLE V

Pattern of Responses to Value Items (N = 149)

	Value Item	Per Cent Responding "Extremely Important"
A.	A stable, secure future	44
B.	Freedom from pressures to conform in my personal life	24
C.	An opportunity to use my special aptitudes and abilities	40
D.	An opportunity to be helpful to others	49
E.	An opportunity to be useful to society in general	33
F.	A chance to exercise leadership	7
G.	Social standing and prestige in my community	3
H.	Opportunity to be creative and original	24
I.	A chance to earn enough money to live comfortably	35
J.	Opportunities to work with people	32
K.	A chance to achieve recognition from others in my field	3
L.	Freedom from supervision in my work	4
M.	The absence of high pressure which takes too much out of you	38
N.	Opportunities for moderate but steady success rather than the chance of quick success or failure	25
O.	Live and work in the world of ideas	28

the choices of the value items, (2) to plot clusters of value items, and (3) to portray the relative psychological distances existing among both clusters and individual responses to the value items.

The relationship existing among choices of value orientations can best be conceptualized as involving degrees of psychological distance. To illustrate this concept, suppose that, among three main schools of art, a patron most liked some form of abstract art. We would therefore expect that he would least like realistic paintings, and that he would probably be more amenable to impressionism. We could say then that the realism school would be psychologically most distant, while impressionism would be psychologically closer to our lover of abstract art.[1]

We intend to study the relationship existing among the value items in the same manner. Given that the teachers may respond favorably to some value item, what other items are they most likely to respond to favorably and what items are they least likely to respond to favorably? If we can answer this question, we will be able to ascertain the degree of psychological proximity of one value to another on the basis of the frequency of the response "extremely important" to each of the items.

The Coombs method, roughly analogous to factor analysis, resulted in the derivation of two principal dimensions.[2] The first dimension is indicated by the order of value items on the next page:

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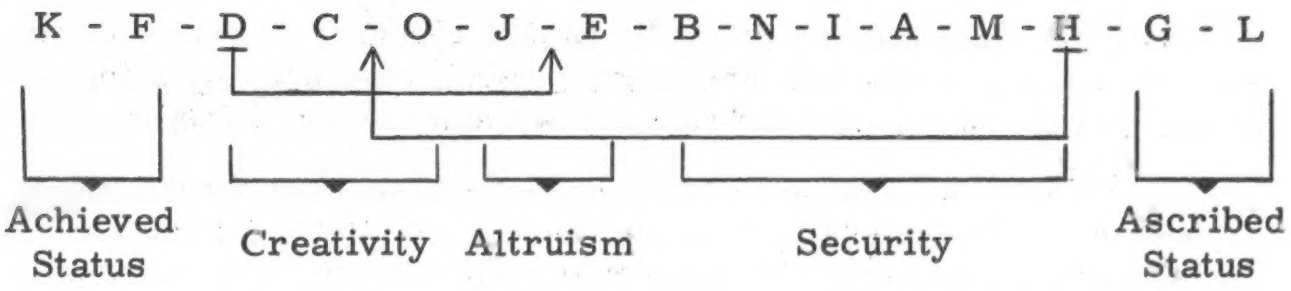
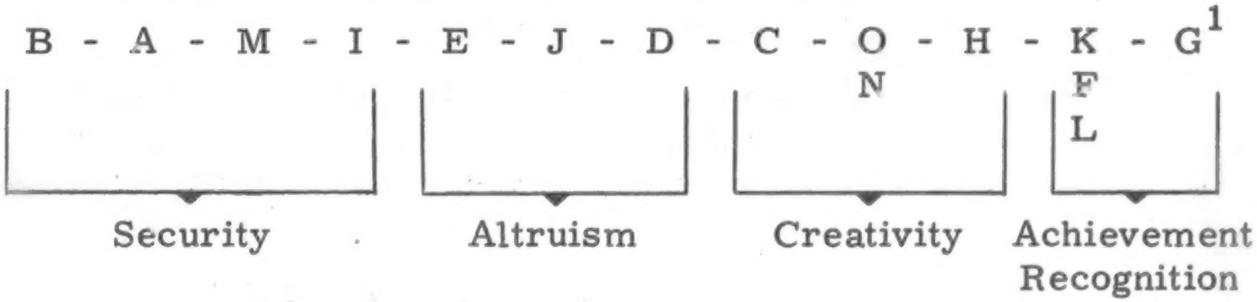
[1] Interpreting choices in terms of psychological distance has found empirical support in Paul F. Lazarsfeld and Patricia L. Kendall, Radio Listening in America (New York: Prentice-Hall, Inc., 1948). See also the discussion by Rosenberg, op. cit., pp. 13-15.

[2] It is not necessary to describe the method in full since this has been done by Coombs. It is sufficient to note that it involves viewing the responses as stimulus points in an "euclidian space of unknown dimensionality r, and at least a partial order of the inter-point distances," where the partial order is defined by the rank ordering of frequencies of joint choices of every possible pair of stimuli. Those stimuli least frequently chosen together are viewed as psychologically most "distant." The problem becomes that of fitting the remaining stimuli which have been ordered in terms of frequency of joint choice between these in such a manner that the proximity between each of them is maintained. For example, where A<B>C the ordering becomes A-C-B. In cases where not all partial orders may be satisfied by one dimension, a second dimension, orthogonal to the first, is derived. The ultimate number of dimensions derived depends upon the number of partial orders satisfied.


K - F - D - C - O - J - E - B - N - I - A - M - H - G - L
Achieved Status
Creativity
Altruism
Security
Ascribed Status

This dimension satisfied 47.3 per cent of the required orderings. It may be interpreted as being primarily one of status: beginning with status achieved, and most similar to creativity, to ascribed status, proximate to security. Two items, however, appear to be located in contexts other than expected. These are the altruistic item D and the creative item H. Arrows indicate their expected location.

A second dimension, satisfying an additional 35 per cent of the orderings, was derived as follows:


B - A - M - I - E - J - D - C - O - H - K - G[1]
N
F
L
Security
Altruism
Creativity
Achievement Recognition

Plotting these values in a space defined by these two dimensions (status and security) resulted in the distribution shown in Figure 1, on the following page. As noted from the plots, the items tend to fall in three main clusters. The items A, I, M form a cluster of security-related items. Items E and J form a cluster of altruistic items; while D, C, O form a combination, altruistic-creative cluster. K and F, the "achieved" status items, and L and G, the "ascribed" status items, form additional separate groupings.

The psychological distances among the clusters and individual items may be noted by following a circular progression

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[1] Letters above and below the main dimension indicate similar "locations."

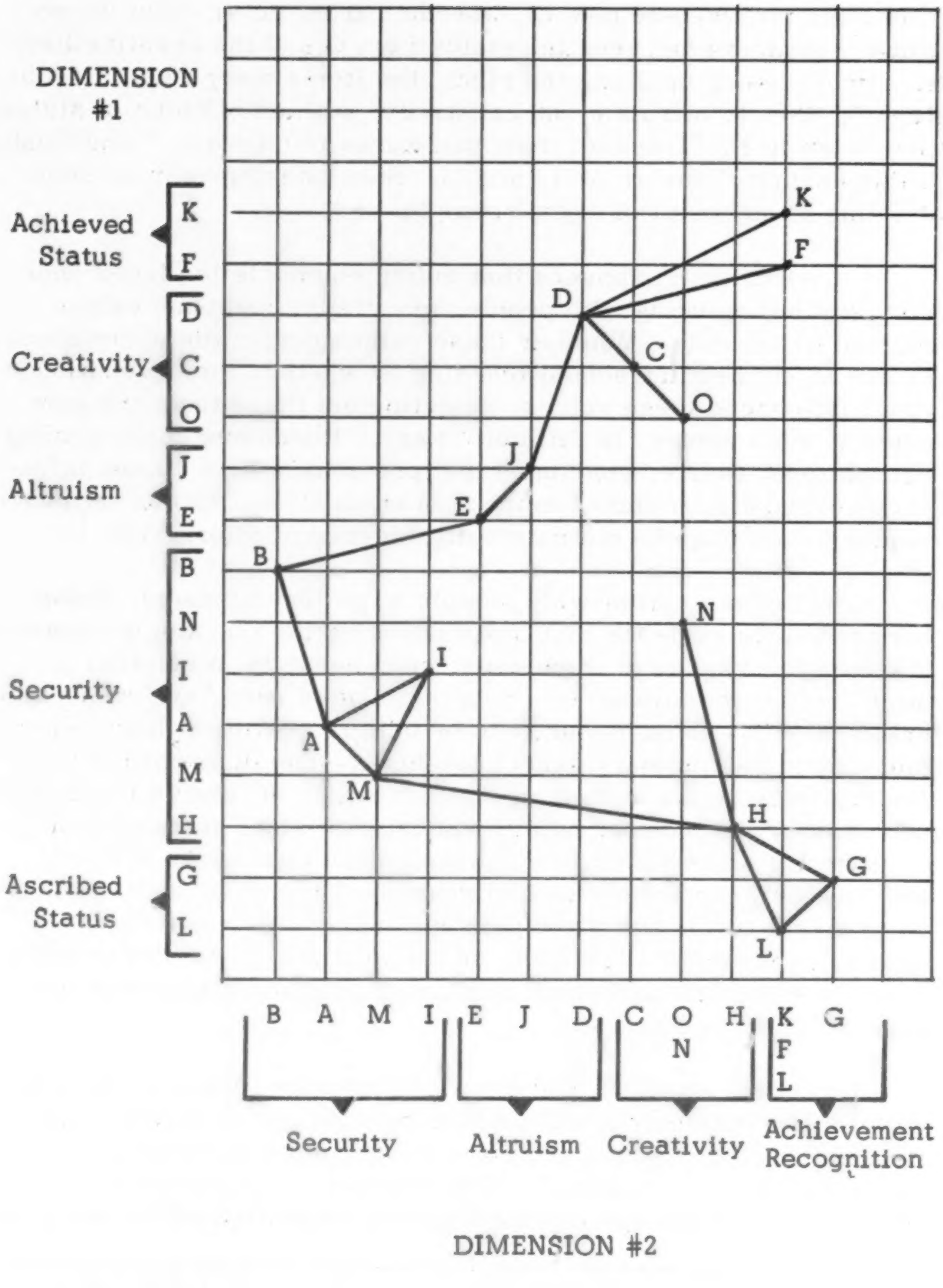

Figure 1.--Two-Dimensional Plot of Value Stimulus Points.

among them. Starting with the "offshoot" at the lower right corner of the matrix, we see how L, "freedom from supervision in my work," mediates between the status item G and the creative item H. Progressing up along the right, the items merge into a security item N, then to altruism and creativity, with an offshoot of status; then down to B, "freedom from pressures to conform," and finally to the security cluster A, I, and M. Such phasings can be seen, starting at any point on the circumplex.

Overall, it appears that major emphasis is placed upon altruism and working with people, creativity, and upon values related to security. Whether these values guided the occupational choice of elementary school teaching or whether the occupation itself influenced these values, selecting out those teachers amenable to such values, is difficult to say. Rosenberg, in analyzing occupational choice, concluded that previously-held values influenced occupational choice more than occupational choice influenced values -- although he did note a high degree of interaction.[1]

From a nation-wide sample of college students, Rosenberg provides evidence that those choosing the teaching profession placed a low degree of importance upon security in relation to other "value complexes" -- "people oriented" and "self-expression oriented." We found security to be held in relatively high importance by the elementary school teachers. The discrepancy in findings may be due both to age and to length of time in the teaching profession. In order to note the possible effects of these upon selection of value items, we compared age and length of time teaching between those who had responded to one or more of the value items within the three principal value clusters with those not having done so. Table VI, on the next page, shows the differences in mean age and mean number of years in the profession between these two groups.

In the altruism and altruism-creative clusters, no meaningful difference exists -- in either median age or median years in the profession -- between those respondents included and those not included in the clusters. With respect to the security cluster, however, the mean age for the teachers classified within the cluster was 45, while the mean age of those teachers not so classified was 39.8. Further, those teachers holding one or more of the security items to be extremely important had taught for a mean of 17.5 years, while those not so viewing these items had taught for a mean of 10.9 years.

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[1] Rosenberg, op. cit., pp. 71-81. Rosenberg implies that there is a matching up of occupational norms with individually-held values.

TABLE VI

Comparison of Primary Value Clusters by
Mean Age and Mean Years in Teaching

Cluster and Factor	Included in the Cluster	Excluded in the Cluster
A. Security Cluster:		
Mean age	45.0	39.8
Mean years in the profession	17.5	10.9
Number	96	52
B. Altruistic Cluster:		
Mean age	42.2	44.5
Mean years in the profession	14.8	15.5
Number	69	79
C. Altruistic-Creative Cluster:		
Mean age	42.8	43.4
Mean years in the profession	15.8	13.8
Number	95	53

The apparent discrepancy with Rosenberg's findings thus seems to be at least partially explained on the basis of age and years in the profession. The older teachers tend to place more value upon security. Similarly, the longer they have taught, the more likely will there be a high-placed value on security. The altruism and the altruism-creativity clusters appear to be independent of age or number of years in the elementary teaching profession.

Attitude Toward ITV

In this report we shall be concerned with factors that affect the acceptance or rejection of one specific change in the occupational expertise of teaching, instructional television. Instructional television represents a new and rather dramatic trend in American education and would seem to be a change of sufficient proportions to be perceived by the teachers as either compatible or incompatible with various portions of their role sectors and, accordingly, accepted or rejected by them. If we can gain some understanding of how ITV comes to be accepted or rejected, then hopefully we will also have gained some understanding of the factors and processes that may contribute to the acceptance or rejection of many other kinds of changes in expertise as well.

Ideally, we would like to have let the way in which ITV was used by teachers be our principal measure of their acceptance or rejection of ITV. Unfortunately, this was impossible. In the first place, there was no uniform basis for qualitatively comparing different uses of ITV. No less than three separate ITV systems were in operation in the schools in our sample, each with its own separate set of course offerings and circumstances of viewing. As we shall subsequently see, the five schools where ITV was used differed widely among themselves with respect to which teachers used ITV, which programs were to be viewed, and with respect to norms surrounding its use. In the second place, even had we been able to solve the considerable problems involved in measuring qualitative and quantitative patterns of use within these differing contexts, the fact that only about one-third of the teachers in the sample had had any experience in using ITV would have left a sample too small for adequate analysis. For these reasons, as a specific measure of the acceptance of change, we have confined our attention to the attitudes of teachers toward ITV. Since all teachers in the sample could have opinions about ITV, such a measure cuts across, but is not independent of, situational and circumstantial variations in the use of ITV. Focusing upon attitudes toward ITV also provides us with the opportunity of making comparisons between the reactions of teachers in schools where ITV is being used and those teachers in schools where it is not available. Presumably too, the measure is correlated with the actual nature of the use of ITV -- although the extent to which this is so must remain a problem for future empirical determination.

At an early point in the study, it became evident that even the teachers' attitudes toward ITV were complex, and heavily qualified with respect to specific situational factors, so that adequately representing them in terms of a simple, unidimensional scale would be difficult. In an effort to do the least amount of violence to the richness of this material, and in order to use as much of it as practicable in the actual analysis itself, teachers were asked during an interview to respond to the following open-ended question: "What about ITV? What's your reaction to that?" Responses to this question were coded (a) by the number of separate qualifying comments, and (b) on a three-point scale ranging from generally positive, through neutral or undecided, to generally negative.

In light of the remarks concerning the complexity of the attitudes toward ITV, some comments may be in order as to the advisability of assigning positive, neutral, and negative connotations to them. This approach was adopted because, in spite of the fact that it cannot fully reflect the diversity and contingent quality of the attitudes as reported by the teachers, it indicates an over-all, or "net" acceptance of ITV.

Ascertaining the general "drift" of the attitude guided the coding of this question. For example, a response could be coded as positive, and still be qualified by negative comments -- and vice versa. Three experienced coders agreed on the classification of 94 per cent of the 154 teachers' responses on the above question. The nine cases that did not receive unanimous agreement initially were re-examined and a classification agreed upon by the authors.

Some notion of the kinds of responses that were coded positive, neutral, and negative can be gathered from the following examples, which also reveal the complexity and diversity of the qualifying comments.

Responses Coded as Generally Positive

I enjoy it at my grade level. Perhaps there's too much Spanish. Social Studies is wonderful -- the teacher is great. I can tolerate the music because I can't sing. T.V. has access to things that the individual teacher doesn't have.

I never had any contact with it, but I attended several M.E.A. meetings on it. I saw a science course at home on it. I think it would be an advantage in the classroom. If the building were equipped for it, it would be a wonderful medium.

I couldn't really answer. It's not used here. But if it's correctly used, how could it but be a help -- especially for science. It might be best in the upper grades, or where the teacher is least prepared. Of course, it wouldn't take the place of the teacher. Generally T.V. has really improved the children's knowledge.

It's not as ideal as we'd like it to be. There are a few teachers who aren't trained to use it, but they pick it up. It's a wonderful teaching tool if you can follow it up.

We love that. The Spanish is lovely. Although she [the TV teacher] makes mistakes, it teaches us to stay alert -- we catch her up.

I think it's very good. Every Tuesday we have it on. My children know the subject that was covered -- I had taught it, but her [the ITV teacher's] approach was so different that they got a different point of view. I think T.V. is very good the way it is here. Spanish isn't too good though -- my children aren't doing too well, but neither am I.

Responses Coded as Generally Negative

I'm against it. Children at my level just aren't interested in it. From the experience I have had, I just don't agree with using it. I think the teacher should have a close association with children.

I don't care for it. I used it last year for Spanish. I found children couldn't even read English let alone Spanish.

If I were absent, they got all fouled up. They also got bored. The second time I used it, we had books that didn't follow the program -- they were for high school. I also watched a reading program -- the sound was bad, and the teacher went too fast.

I think it's loathsome. It's impersonal. The retention of it is about two seconds. In my areas, the programs are amateurish and the kids are bored. They see too much T. V., and they forget it all.

It's like an old fashioned lecture. It's not good for younger children. There's no interchange between pupil and teacher -- they just sit there and watch. I can accomplish more by myself. Generally, it's not worthwhile.

I don't know -- I haven't seen it. I had a third grade that went to watch it -- in the auditorium. They were a slow group, and I was using a second-grade reader, but the T. V. was using a third-grade reader. They'd give tests and they'd miss all the questions, but they still had to go. I never got to go. I don't see how you can replace face-to-face teaching.

I'm not using it and don't think I'd want it. They have to use follow-up. It's no good unless you do. It'd be just one more thing to contend with.

Responses Coded as Generally Neutral or Unresolved

I've never used it or seen it used. It might not be appropriate to use T. V. for first or second grades too much, but later on it might be good.

I don't know enough about it to say.

I don't know anything about it. Many teachers don't like it, especially Spanish. I only know about the others.

I couldn't answer. All I know is hearsay.

I don't have any opinion.

It is to be noted that two kinds of responses comprise the "neutral" attitude: those that express a lack of information upon which to base an evaluation, and those, such as the first example above, that seem to represent a "balance" between positive and negative qualifications.

It is reasonable to suppose that attitudes expressed toward ITV differ depending upon whether ITV is actually being used in the school. Table VII, following, shows the attitudes of teachers toward ITV in schools where it is being used and in schools where it is not being used. It appears that teachers in schools where ITV is being used are relatively less favorable in their attitudes toward ITV than are teachers in schools where ITV is not being used.[1] In the non-using schools, 62 per cent of the teachers expressed positive attitudes, and 14 per cent expressed negative attitudes; while in using schools 48 per cent of the teachers were

TABLE VII

Attitudes Toward ITV in Schools Where ITV Is Used and in Schools Where ITV Is Not Used

School Use of ITV	Teacher Attitude Toward ITV							
	Favorable		Neutral		Unfavorable		Total	
	%	No.	%	No.	%	No.	%	No.
Used	48	53	23	18	36	40	100	111
Not used	62	27	16	10	14	6	100	43
Total	--	80	--	28	--	46	--	154

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[1] The reader who is curious as to the absence of statistical tests of significance may turn to Appendix A for an explanation. Briefly, we have adopted the position that findings may be accepted as valid when they are (a) consistent with theoretical expectations, (b) consistent with other findings in the report, and (c) when likely alternative explanations have been eliminated.

positive, and 36 per cent negative. There are also somewhat more neutral attitudes in the non-using schools than in using schools: 23 per cent and 16 per cent, respectively.

What are we to make of these differences? Why should teachers who have never used ITV be relatively more favorable towards it than teachers who have used ITV, or who are in schools where it is used? One reason is that the professional literature is filled with generally favorable reports concerning many of the new educational innovations, including ITV. Hence what the teachers do know of it is generally favorable. It is certainly possible that, prior to their exposure to ITV, the teachers in those schools which are currently using television would have had attitudes toward ITV that more closely resemble the attitudes of our teachers in the non-using schools. It is always hazardous to extrapolate from non-longitudinal data to longitudinal processes. Ideally, one would want panel data in order to venture such conclusions. Nevertheless, we do have two pieces of evidence which suggest, by virtue of their consistency with the theoretical position of Chapter I and with each other, that some of the teachers in using schools may have changed their attitudes toward ITV as a result of their increased contact with it.

The first such evidence concerns the teachers' perception of changes in their attitudes toward instructional television. The teachers were asked if they had always felt as they did about ITV, or if their opinions had changed. We have excluded from analysis all those teachers who were not able to recollect whether their opinions had changed or not, and all teachers who indicated that they did not know enough about ITV to have formed an opinion. But for the remaining teachers (those who indicated an awareness of change or lack of change in their attitudes, and who had a clear opinion of ITV -- whether positive, negative, or neutral), the results are consistent with our expectations. Table VIII, on the next page, summarizes these results.

While most teachers were not aware of having changed their opinions, most of those that did report such an awareness are from using schools. Only 1 per cent of the teachers in non-using schools report that their opinions have changed, while 31.5 per cent of the teachers from using schools report such changes in attitude. Interpretation of these data is subject to all of the usual cautions regarding the possible distortions that may occur when past behavior is recalled. However, we are concerned with the relative percentages of perceived change in using and non-using schools, not with precise figures on the actual number of changers or non-changers. It is more natural to suppose that the figures are a reasonably accurate reflection of the changes which actually have occurred, than that they have been produced by capricious memories.

TABLE VIII

Perceived Changes in Evaluation of ITV by Teachers in Schools Using or Not Using ITV

School Use of ITV	Perceived Change					
	No Change		Change		Total	
	%	No.	%	No.	%	No.
Used	68.5	61	31.5	28	100	89
Not Used	99.0	29	1.0	2	100	31
Total	--	90	--	30	--	120

The second piece of evidence suggesting that changes in attitude have occurred in schools using ITV is concerned with the concepts of compatibility and incompatibility. Our theoretical orientation, as set out in Chapter I, indicates that a change in expertise, such as the use of ITV, will be accepted to the extent that it is perceived to be compatible with norms governing role behavior, and that it will be rejected to the extent that it is perceived to be incompatible with, or disruptive of, these norms. If changes in teachers' attitudes toward ITV have occurred in schools using ITV, then these changes ought to have been mediated by perceived compatibilities and incompatibilities. We should also expect a greater number of perceived compatibilities and incompatibilities in schools where ITV was being used than in schools where it was not being used, for the closer one came to actually using some change the greater would be the opportunities for experiencing, or for becoming aware of, ways in which use of the change might supplement, aid, or involve alterations of existing role behavior.

Some indication of the number of perceived compatibilities or incompatibilities between ITV and the norms governing the enactments of the various role sectors can be gathered from the number of separate qualifying statements that composed the teachers' attitudes toward ITV. As Table IX shows, the number of qualifying comments involved in the evaluations of ITV are greater in using than in non-using schools. This finding is consistent with our theoretical expectations, and also with the data in Table VIII, which show a greater frequency of perceived attitude changes in the using than in the non-using schools.

TABLE IX

Number of Qualifying Comments in Attitudes Toward ITV by Teachers in Schools in Which ITV Is and Is Not Being Used

School Use of ITV	Number of Qualifying Comments					
	Few (0-1)		Many (2-5)		Total	
	%	No.	%	No.	%	No.
Used	63	69	37	40	100	109
Not Used	81	35	19	8	100	43
Total	--	104	--	48	--	152

Let us briefly review the analysis so far. We began with a comparison of the attitudes of teachers toward ITV in schools where ITV is not being used with the attitudes of teachers toward ITV in schools where it is being used. We found that teachers in non-using schools were generally more favorable toward ITV than teachers in using schools, and speculated that teachers in using schools may have changed their evaluations of ITV after having come in contact with it. We suggested that, if the teachers in using schools had actually changed their attitudes, they should have a greater awareness of such a change and should perceive a greater number of compatibilities and incompatibilities between their roles and ITV. Both of these hypotheses were borne out.

The Use-Attitude Relationship

But what are the sources of such compatibilities and incompatibilities? Our theoretical perspective suggests that they can stem from a number of sources. As our discussion earlier in this chapter and in Chapter I suggests, one important source are the norms which govern the orientations of members of an organization toward changes in general, and toward various specific changes. We should expect that policy decisions by legitimate authorities in the school organization regarding such changes, and the commitment of teachers to such authority, would have a marked effect upon the attitudes of teachers toward changes. There will be other sources of perceived compatibilities and incompatibilities of a specific change such as ITV. The many specific attributes of ITV and the specific circumstances and situations which surround its use will also be perceived by teachers as more or less compatible with the various portions of total role behavior.

Ideally, when assessing the impact of any one of these factors upon attitudes expressed towards ITV, we would want to be able to control for the effects of all of the other conditions which also affect these attitudes. Unfortunately, however, we have too few cases to permit the introduction of controls for all factors simultaneously. Consequently, we must follow a somewhat different procedure. We will utilize a general control variable -- one that we believe to be associated with a number of factors that have an effect upon attitudes toward ITV. With the relationship between this control variable and attitudes toward ITV as a standard or base, we will then systematically introduce independent variables and note their effect upon the standard relationship.

The control which we will use recommends itself because of its simplicity and its direct relationship to the kinds of experiences which would tend to produce positive or negative attitudes toward ITV. The control is simply whether teachers have ever used ITV or not.

As we shall subsequently see, the use or non-use of ITV in schools where the use of television is largely an administrative matter is a function of official policy decisions. Hence, roughly speaking, using teachers are similar in that their use of ITV, for whatever reason, is in accordance with official policy. Non-using teachers are similar to one another in that their non-use of ITV, for whatever reason, is consistent with official policy. Hence, the two groups, users and non-users, bear similar relations to the prevailing norms regarding use or to the policy decisions of legitimate authority within the school. Furthermore, the use and non-use distinction can be expected to be associated with the extent of a teacher's intimacy with ITV -- with the specific attributes and characteristics peculiar to it, and with the circumstances surrounding its use -- and hence can be expected to be differentially associated with those conditions which the teachers perceive as compatible or incompatible.

Looking now at only those schools where ITV is being used, we can observe the relationship between the attitudes of those teachers who have used instructional television, regardless of how much or how extensively or for whatever reason, and those who have never used it.[1] In Table X, on the following page, we find a strong relationship between use and positive attitudes, and between non-use and negative attitudes toward ITV. The strength of this relationship is indicated by a λ*b value of .37 -- where λ*b is a measure of strength of association which indicates, in this case, the per cent improvement over chance in predicting the attitudes of teachers toward ITV gained from knowing whether the teacher is a using or non-using teacher in a using school. The reader will find a more extensive discussion of this measure in Appendix B.

As already noted, we expect that this association between use, non-use, and attitude toward ITV is a consequence of a number of factors: official norms or policies regarding use or non-use and the teacher's commitment to them, numerous specific attributes of ITV, and the circumstances surrounding its use in various schools. We will refer to this relationship between use and attitude as the standard or base use-attitude relationship. In subsequent chapters, we will be concerned with whether various independent variables (i. e., sources of compatibility or incompatibility) cause the λ^*b value to exceed, or to fall below, this standard use-attitude relationship value of .37. In Chapter III, the effects of commitment to organizational norms and values will be examined in this way. In Chapter IV, the effects of factors associated with the classroom role sector upon the relationship will be assessed. And in Chapter V, we will consider some of the effects of extra-organizational factors upon the size of the use-attitude relationship, and upon a measure of general orientation toward change which will be introduced at that point.

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[1] Teachers with neutral attitudes were omitted from this analysis in order that we might be concerned with the more extreme cases -- positive and negative attitudes.

TABLE X

The Relationship Between Use and Non-Use of ITV and Attitudes Expressed Toward ITV in Schools Where Television Is Used*

Teacher	Attitudes Toward ITV		
	Favorable	Unfavorable	Total
Using ITV	34	12	46
Not Using ITV	13	26	39
Total	47	38	85

*The strength of the association or relationship is indicated by $\lambda^*b = .37$.

CHAPTER III

THE INFLUENCE OF COMMITMENT TO THE ORGANIZATIONAL ROLE SECTOR UPON ATTITUDES EXPRESSED TOWARD ITV

Introduction

We suggested in Chapter I that important factors affecting the acceptance or rejection of changes are the norms and values related to such changes. Where these norms and values are favorable to the acceptance of some change, and individual actors are committed to them, then they are likely to be favorable toward that change. Where the individual actors are not committed to such norms, there is less likelihood of their being favorable toward the change.

In our review of commentaries on the training and orientation of elementary school teachers, we indicated that commitment to the organization of the school does not appear to contradict the teachers' notions of professionalization, but may be an important component in defining such notions.

In this chapter, we will attempt an analysis of the implications of commitment to the school organization and its effects upon attitudes expressed toward ITV. We will discuss the scope and meaning of the organizational role sector and note the effects of commitment to this sector upon attitudes expressed toward ITV, and test hypotheses derived from this discussion.

Scope and Meaning of the Organizational Role Sector

One of the implications to be drawn from the discussion in Chapter II is that teachers tend to look to the administration of the school organization for cues regarding the adequacy of their role enactments. In elementary education, control over the introduction or adoption of major changes is the responsibility of the administration. This is not to say that the teachers' behaviors are completely determined by administrative policy. But, in general, it appears that the administration establishes policies and defines the boundaries within which the teacher is free and expected to exhibit initiative, autonomy, and innovativeness. Hence, unlike the farmers and physicians considered in Chapter I, the adoption of a major change in teaching expertise, such as ITV, is not a matter of the separate decisions of individual teachers. Even when teachers do play a part in changes in their professional expertise -- in evaluating and proposing changes in curriculum for example -- the final decision is an administrative one and becomes policy by official administrative action. In view of this assignment of legitimation to the administration, school organizations display many of the characteristics of formal organizations.

The bureaucratic structure as defined by Max Weber has typically been held to be the prototype for "rational" organizations. Extensions and implications for such a structure have been analyzed by a host of authors including Barnard, Gouldner, Selznick, March and Simon, and Blau. The common theme of these authors is that the viability of a formal organization rests upon a sharing by organizational functionaries of similar values and norms. As one author states, "The values justify the existence of the system, while the norms define its roles and patterns of interaction."[1] "Values" in our view may be held to be similar to norms, but at a broader, more generalized level. For the sake of parsimony, and in order to connote a broader range of behaviors, we shall use the term "value" as distinctive from the more specific connotation of "norm."[2]

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[1] Terrence K. Hopkins, "Bureaucratic Authority: The Convergence of Weber and Barnard," in Amitai Etzoni (ed)., Complex Organizations (New York: Holt, Rinehart, and Winston, 1961), p. 96.

[2] See Howard Becker's discussion of "Value" in Julius Gould and William L. Kolb, A Dictionary of the Social Sciences (New York: The Free Press of Glencoe, 1964), pp. 743-745.

In this chapter, we are concerned with two kinds of commitment: commitment to organizational values, and commitment to organizational norms. While we may think of individuals as committed to norms in various degrees of intensity, we may also think of them as committed to different norms or referent points within the organization. The different referent points of commitment are associated in large degree with the different hierarchical levels of the roles within the organization. The higher the role in the hierarchy of a bureaucratic-like organization, the more will it be of a coordinating nature for other roles subordinate in organizational rank. Referent points of commitment for role occupants at the upper hierarchical levels of the bureaucracy are more likely to be the values of the organization. At the lower levels, on the other hand, roles tend to be of a highly specified nature. The incumbent need not be concerned with the enactment of other roles. At this level, the most salient referent points of commitment are likely to be the specific norms, or regulations defining the manner in which the role is to be enacted.

Were the teachers only involved in classroom instruction, we would expect their commitments to the school organization to be directed primarily to those norms governing those acts related to instruction. In the extreme case, they would care little about the policies or rationale lying behind these norms. But teachers are not only involved in classroom instruction. They must also meet certain other organizational expectations if the school is to remain viable. In this, they are somewhat unique -- in contrast to functionaries in other bureaucratic-like organizations whose roles are highly delineated. These organizational expectations stem from two organizational requirements: (1) the necessity to maintain public support for the existence of the school, and (2) the necessity to prevent disruptions to the internal structure of the organization. Typical of meeting the first-mentioned organizational requirement are involvement in PTA and Parent-Teacher conferences. These duties appear to facilitate school-community cooperation. The second set of expectations includes duties of two different types: (a) organizational, "house-keeping" chores which include supervisory duties, clerical work, record keeping, and instruction coordination, and (b) involvement in organizational functions, such as faculty and committee meetings, which aid in reducing the potential gap between the interests of the teachers and those of the administration. All of the functions above require the teachers to be involved at least to some extent in organizational functions within both the local school and the larger school system.

The result of the "multiple-status" role occupancy of teachers is the likelihood of their being committed to either, or to both, the norms governing the acts associated with instruction, and the more comprehensive values of the school organization within which these norms occur.

Implications of Commitment to the School Organization for Attitudes Expressed Toward Change

It had been our contention in the previous discussion that teachers may be viewed as occupying simultaneously two different levels of organizational roles. These two levels include the potential for being committed to either, or to both, the organizational values and the organizational role norms. Commitment to organizational values is likely to foster among teachers an orientation similar to that of the administration. It implies an "understanding" of policies and an identification with the reasons lying behind them. It would thus appear reasonable to assume that the degree of commitment to the school organization would influence the degree to which a specific change is viewed by the teacher as legitimate, and hence as compatible to the teacher's role within the school. In contrast, commitment to highly specified role norms implies a reliance upon the validity of specific organizational policies. The degree of reliance upon these policies would also appear to influence attitude toward change, but for different reasons. Commitment to specific norms implies a more-or-less blind acceptance of the legitimacy of organizational policies. In both instances the perceived compatibility of a change with the teacher's role is likely to be a function of commitment to either one or both the values and the norms of the school organization.

In the case of the schools in our study, the adoption of ITV was an administrative decision made to apply to the school as an organization. Once ITV had been adopted, its use or non-use by the teachers was a matter of official policy. Unfortunately, it was difficult to determine the precise nature of the specific norms governing the use or non-use of ITV for each of the teachers in the five schools in our study where ITV was being used. For the most part, use was mandatory for at least a certain portion of the programs available to the teachers. There was some leeway, however, in the extent to which organizational norms explicitly required such use. In four of the five schools where ITV was being used, its use was required for at least one subject where it was applicable to the grade level of the students. In some of these schools additional programs could be watched if the teacher so desired and could fit it into her schedule. Some teachers used ITV occasionally for special programs only. For the remaining school, use by the teachers who could do so was strongly encouraged. As one teacher put it, "We were given the impression that we were privileged to use it." However, shortages of sets, problems of scheduling, and the number and variety of programs available for viewing, contributed to the great differences surrounding the manner of use of ITV. Thus, although we cannot specify the precise norms that govern the use of ITV by teachers, we do know that whether they used it or not was a matter of organizational policy.

In the following section we shall first consider certain hypotheses with respect to commitment to organizational values. This will be followed by a presentation of our findings. We shall then consider the empirical support for hypotheses regarding commitment to organizational norms.

Effects of Commitment to Organizational Values

The Hypotheses

In considering commitment to organizational values, we should expect the following: (1) In schools where the policy of the organization is to use ITV, those teachers who are highly committed to organizational values will more likely be favorable toward ITV than those teachers who are less highly committed. We expect this to occur because of the likely relationship between this kind of commitment and an understanding of the rationale for the organizational policies. (2) In schools where ITV is not available, there will be little effect of organizational commitment upon attitudes expressed toward ITV. This is likely simply because no policy may have been formulated regarding the inclusion or exclusion of ITV into the organization of the school. (3) In schools where ITV is available, the relationship between use and attitudes expressed toward ITV will be stronger for those teachers who are highly committed than for those who are less committed. Further, it is expected that the use-attitude relationship will be stronger for the highly committed than will be the same relationship where commitment is not considered at all -- as shown in Table X of Chapter II. This last relationship is expected as a logical derivative of the first hypothesis.

The Index

The index designed to measure the degree of commitment to organizational values was constructed from responses regarding participation in, and attitudes toward, four components of the organizational role sector: faculty meetings, service committees of the local school, study committees of the local school system, and PTA functions. The rationale for the construction of this index is that it involves both attitudinal and behavioral dimensions of commitment. It is held that, with greater participation, exposure to administrative behavior related to policy-making will increase. Further, with favorable attitudes toward this participation, a greater commitment to, and a resulting identity with, the values involved in policy-making is likely to ensue.

Participation was determined by summing, for the four components, the scores which ranged on a seven-point scale from "more than once a week" to "once a year." A high score thus represents a low frequency of involvement. For the attitude expressed toward organizational participation, scores which ranged on a five-point scale from "enjoy very much" to "dislike very much" were summed. A high score represents an unfavorable attitude toward organizational involvement.

A product moment correlation was run on the two indices above with a resulting correlation of .081. Because of this low degree of association, these indices were combined, resulting in the distribution of cases shown in Table I on the next page.

The two dimensions were split at the median, giving the array shown in Table I. Considering each of the cells, the highest degree of commitment to organizational values is held to obtain in Cell I, under conditions of high involvement and a high degree of favorability toward involvement. The lowest degree of commitment is held to occur in Cell IV under conditions of low degree of involvement and a low degree of favorability toward involvement. The conditions indicated by Cells II and II are viewed as intermediate between the two extreme conditions.

Validity of the Index

Before noting the effects of commitment to organizational values upon attitudes expressed toward ITV, we shall first establish grounds for the validity of the commitment index by noting concurrent findings. One principal variable in this regard is the use of professional and organizational sources of information for ideas about methods and techniques of instruction. It is our thesis that, associated with increased commitment to organizational values, will be an increased awareness of issues and changes occurring within the teaching profession as well as in the school organization itself. We should expect, therefore, that those teachers having a high degree of commitment toward the values of the school organization will be more prone to use professional and organizational sources of information as a means of receiving ideas about methods and techniques of instruction than will be the teachers who are less committed to the organizational values.

TABLE I

Organizational Involvement and Attitude Toward It

Commitment	Teacher Attitudes		Total
	More Favorable	Less Favorable	
High	Cell I 44	Cell II 35	69
Low	Cell III 34	Cell IV 42	76
Total	78	67	145

To indicate the degree of use of these sources of information, the response scores to five items were summed across a four-point scale ranging from a low score of one for "use this source a great deal" to a high score of four for "never use this source." The "professional source" items were: (1) professional journals," (2) "long-term teachers in this school," and (3) "newer teachers in this school." The range of scores was divided as near as possible at the median, yielding two groups: "high" and "low" users of these sources of information.

The association of commitment to the values of the school organization with the use of professional sources of information is shown in Table II, below. As shown in the table, highly committed teachers (type I) are more likely to make use of professional sources of information than teachers who are less committed. The strength of association is indicated by a λ*b value of .19. Teachers classified as Types II and III were split in their high or low use of professional sources of information.

TABLE II

The Effects of Commitment to Organizational Values upon Use of Professional Sources of Information*

ommitment Type	Frequency of Use		Total
	High	Low	
I (High)	31	13	44
II and III	30	29	59
IV (Low)	16	26	42
Total	77	68	145

*The strength of the association is indicated by λ*b = .19.

A similar association is to be noted between the use of organizational sources of information and commitment to organizational values. Items for the degree of use of these information sources were constructed in the same manner as above. The five relevant items were: (1) "school system newsletter," (2) "suggestions given by administrative policies," (3) "the principal,"

(4) "faculty bulletin board," and (5) "teacher committees in this school system." Scores were again broken as near as possible at the median, resulting in the distribution shown in Table III, below.

TABLE III

The Effects of Commitment to Organizational Values upon Use of Organizational Sources of Information*

Commitment Type	Frequency of Use		Total
	High	Low	
I (High)	26	18	44
II and III	26	33	59
IV (Low)	17	25	42
Total	69	76	145

*The strength of the association is indicated by λ*b = .126.

The effect of commitment to organizational values upon the use of organizational sources of information is in the same direction as that for the use of professional sources of information. Those more committed were more likely to use such sources than those less committed. The measure of association is indicated by a λ*b value of .126. These findings lend validity to our measure of commitment to the organizational values of the school.

Effects of Commitment to Organizational Values upon Attitudes Expressed toward ITV

Evidence for meeting the expectation that commitment to organizational values has an effect upon attitudes expressed toward ITV is given in Table IV, on the next page. Only teachers in schools where ITV is available to at least some of them are included in the table. Comparing across columns, the distribution of attitudes toward ITV in Table IV is in the expected direction. For "Type I" teachers, those who are most highly committed, a greater proportion are favorable toward ITV as compared with the teachers who are less committed. For Types II, III, and IV, the proportions are about equal between those teachers who are favorable and those who are unfavorable toward ITV.

TABLE IV

Distribution of Attitudes toward ITV by Commitment to Organizational Values in Schools where ITV is Available

Commitment Type	Attitude Toward ITV			Total
	Favorable	Neutral	Unfavorable	
I (High)	19	5	7	31
II	6	5	8	19
III	10	2	8	20
IV (Low)	12	4	15	31
Total	47	16	38	101

From our theoretical perspective, it would appear that commitment to organizational values implies an acceptance of administrative policy, and that such acceptance thereupon determines the degree to which ITV is defined as compatible or incompatible with the organizational role of the teacher. The attitudes of the teachers toward ITV are held to be a reflection of these definitions. In the case of the evidence presented above, we interpret the findings to indicate the greater likelihood of highly-committed teachers being favorable toward ITV because of the decision of the administration to adopt it. Continuing this line of reasoning, the distribution in Table IV also suggests that the attitudes of the less-committed teachers may be independent of the organization. The less the organizational commitment, the less likely that there will be organizational influences defining ITV as either compatible or incompatible, and, hence, the less the degree of polarization of attitudes.

TABLE V

Distribution of Attitudes Toward ITV by Commitment to Organizational Values in Schools where ITV is Not Available

Commitment Type	Attitude Toward ITV			Total
	Favorable	Neutral	Unfavorable	
I (High)	6	1	5	12
II	4	3	0	7
III	9	4	1	14
IV (Low)	8	2	0	10
Total	27	10	6	43

The relationship between organizational commitment and attitudes expressed toward ITV in schools where it is not available is shown in Table V, above. The small frequencies in the table make an interpretation of the findings rather tentative. There is an indication, however, that an almost equal division exists between favorable and unfavorable attitudes toward ITV among those teachers who are highly committed to the values of the organization, while almost all of the least committed teachers exhibit favorable attitudes toward ITV. Where ITV is not available, there may have been no clear expression by the administration as to its value. For these three schools, the principals gave the impression that they were in favor of incorporating ITV into the school organization, but that other priorities competing for funds were primarily responsible for its absence. It thus appears likely that commitment to the values of the school organization reduced the likelihood of the teachers being favorable toward ITV. The favorable attitude appears to have been derived independently of the school administration.

From the evidence then, it appears that where the administration has clearly made a decision in favor of adopting ITV, the attitudes of highly-committed teachers become polarized in favor of that decision. Where the issues involved in making a decision are still under consideration, the effects of commitment serve to reduce any potential polarization of these attitudes -- a polarization derived independently of the administration of the school organization.

In Chapter II we presented evidence showing that a relationship exists between use of ITV and attitudes expressed toward it. On the basis of our theoretical framework, we suspect this relationship is due in part to the degree of organizational commitment rather than to idiosyncratic orientation toward ITV. If it is true that using ITV results in favorable attitudes expressed toward it rather than vice versa, and if we are to explain this in terms of organizational commitment, then we must show some relationship between commitment to the organization and use of ITV. Table VI, below, shows this relationship.

TABLE VI

Distribution of Users and Non-Users of ITV by Commitment to Organizational Values

Commitment Type	ITV Users	ITV Non-Users	Total
I (High)	18	8	26
II and III	15	17	32
IV (Low)	13	14	27
Total	46	39	85

As shown in Table VI, over two-thirds of the teachers who are highly committed to the organization of the school tend to be users of ITV. This is in contrast to an almost equal split between users and non-users of ITV among the less committed. These findings are consistent with those previously reported. They are also consistent with our theoretical perspective.

If, in fact, commitment toward the organization influences teachers' attitudes toward ITV, and if use or exposure mediates between organizational commitment and these attitudes, then on the basis of previous findings we should expect that the strength of the relationship between use or non-use of ITV and attitudes expressed toward it will be stronger for those teachers highly committed than for those teachers least committed to the school organization. That is, for the highly committed, users will more likely be favorable and non-users unfavorable toward ITV, than will be the case for the less committed. Table VII, below, presents evidence related to this expectation.

TABLE VII

The Effect of Commitment to Organizational Values upon the Relationship of Use and Attitude toward ITV

Commitment Type	Size of λ*b for the Use-Attitude Relationship	Difference from the Standard λ*b of .37
I (High)	.63	+.26
II and III	.16	-.21
IV (Low)	.27	-.10

From the table, we see that the strongest relationship between use and attitude expressed toward ITV does, in fact, exist for those teachers who are highly committed to the school organization. The improvement over chance is 60 per cent in predicting attitude, if we know that a highly committed teacher uses ITV.

This is a considerable increase in strength of association of use exposure with ITV attitudes where organization commitment is not considered at all -- where the gamma was .37. For those teachers who are least committed, improvement over chance in predicting attitude by knowing whether or not the teacher uses ITV is only 27 per cent. The relationship is less strong for those in the intermediate range of organizational commitment. The findings related to conditions (commitment types) I and IV are consistent with our theoretical expectations. As for the weakest relationship existing for the intermediary levels of commitment, no plausible explanation is possible from our theoretical perspective.

Effects of Commitment to Organizational Norms Governing Acts of Instruction

We have seen that commitment to the values of the school organization tends to influence attitudes expressed toward ITV. Commitment in this sense was held to imply an identification with the school administration and to foster certain attitudes toward ITV based upon the orientations of the administration. Commitment to specific role norms, as we view it, is likely to elicit similar characteristics, but for different reasons since it involves the adherence to sets of expectations without necessarily identifying with them. Thus, norms directly relevent to ITV use or non-use may be just as influential in affecting teachers' attitudes toward ITV as commitment to the values of the organization. In the discussion to follow, we shall refer to those teachers who appear to be highly committed to specific role norms as "conformers," while "non-conformers" shall refer to those who are less committed.

Teachers who are committed to the values of the school organization, and consequently become aware of the decision-making activities underlying organizational policies, are not likely to be the same teachers who feel that they must make a conscious attempt to adhere to the norms of the organization. Their understanding of these norms is likely to remove any feelings of coercion that they must conform. Consequently, we should expect that there will be little association between commitment to organizational values and commitment to organizational norms.

The implications of conformity for attitudes are that (1) conformers who are users of ITV will more likely be favorable toward ITV than "non-conformers" who are users. Similarly,

(2) conformers who are non-users will more likely be unfavorable toward ITV than "non-conformers" who are non-users. However, (3) the effects of conformity upon attitudes expressed toward ITV, independent of use or non-use, will likely be negligible. Finally, (4) we expect that the use and non-use effects upon attitudes expressed toward ITV will be stronger for the conformists than for the non-conformists.

Within the context of "teaching," the respondents were asked to indicate agreement with the three statements about the degree to which they felt a responsibility for "conforming" with certain perceived expectations within the school. These statements and the number of teachers who agreed with them are shown in Table VIII, below.

TABLE VIII

Teachers' Responses to Conformity Items

Degree of Conformity	Statement	Number of Agreements
High	I feel a sense of responsibility for conforming as closely as possible to the decisions of the administration.	46
High	I have to be careful to conduct my classroom according to the wishes of the important people around here, otherwise they can make things quite unpleasant for me.	2
Low	Regardless of what others may tell me, I usually know in my own mind whether or not I am teaching properly.	95

The majority of teachers viewed themselves as remaining independent of any administrative expectations in the manner in which they taught. The issue of a perceived necessity to conform to expectations directed toward a given role incumbent versus an absence of such a perception contains some rather subtle implications. In terms of adherence to a given set of norms, a person who is a member of a group or an organization may follow closely the appropriate set of norms without being aware of any necessity to "conform" with them. As Shibutani has stated, "Once an individual has incorporated the values shared in his group, they no longer appear to him as limitations against which he is opposed, although in some instances this may be the case."[1]

We have no appropriate measures to indicate the causes of the presence or absence of teachers' perceived necessity to conform with the administration. We suspect, however, that where such perceptions exist, the respondent will be more likely to maintain a restricted definition of role-enactment responsibility than where such perceptions do not exist. It is our contention that a "conscious" conformer will be less likely to accept "risks" to his role incumbency by acting beyong the limits of a defined role than one who perceives no necessity to conform with situationally specific norms. Our conformity index characterized only the perceived necessity to conform with a given set of norms, rather than the degree of conformity with these norms which actually exists -- regardless of the teachers' perceptions.

Validity of the Index

If teachers are highly committed to those specific norms governing the act of teaching, then we should expect an abdication of responsibility for acts tangential to the act of teaching. There-

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[1] Tamotsu Shibutani, Society and Personality (Englewood Cliffs: Prentice-Hall, Inc., 1961), p. 378. In addition, persons who are accepted in a given group tend to feel more free to express dissenting views. See J. E. Dittes and H. H. Kelley, "Effects of Different Conditions of Acceptance Upon Conformity to Group Norms," The Journal of Abnormal and Social Psychology, LIII (July, 1956), 100-107; and Herbert Menzel, "Public and Private Conformity Under Difficult Conditions of Acceptance in the Group," The Journal of Abnormal and Social Psychology, LV (November, 1957), 398-402.

TABLE IX

Distribution of Responses to Item about Assignment of Responsibility for Introducing Innovations

Assignment of Responsibility for Introducing Change	Type of Teacher Responding	
	Conformer	Non-Conformer
Primary Responsibility Assigned to Teachers:		
1. The individual teacher alone . . .	3	9
2. Teachers who are most active or who have special interest in the innovation	1	2
3. Decision should be responsibility of teachers as a group, but with administrative support	7	34
4. Teacher should have major but not total responsibility	3	6
5. Responsibility should be equally shared between the teacher and the administration	6	6
Primary Responsibility Assigned to Administration:		
6. Administration should be responsible, but teachers should voice their opinions	16	25
7. Administration should have entire responsibility but teachers should be kept informed	11	10
8. Total responsibility is solely an administrative matter	0	2
Total	44	94

fore, we should expect that teachers who are "high" on the conformity index will likely place responsibility for introducing change into the school upon the administration. Those who are "low" on conformity will be less likely to assign such responsibility to the administration.

The assignment of responsibility for introducing change was indicated by the teachers in response to an open-ended interview question, "To what extent do you feel the individual teacher should determine what is introduced?" This question was posed in the context of introducing change into the school. Table IX, on the previous page, shows the distribution of teachers by categorized responses.

Comparatively few teachers felt that they alone or as a group should have responsibility for introducing change. Rather, the administration was mentioned most frequently -- in a variety of contexts. The major dichotomy of responses appeared to be between teachers taking on such responsibility, but with administrative support, as opposed to the administration shouldering the major responsibility.

TABLE X

The Effect of Conformity to the Administration upon Assignment of Responsibility for Introducing Change*

Level of Conformity	Responsible Agent		Total
	Administration	Teacher	
High	27	20	47
Low	37	57	94
Total	64	77	141

*The (moderate) strength of the association between "conformity" and "assignment of responsibility for introducing change" is indexed by λ*b = .158.

Teachers' responses to statements 1, 2, 3, 4, and 5 of Table IX were then grouped together as "Teachers' Responsibility." Responses to statements 6, 7, and 8 of Table IX were categorized as "Administrative Responsibility." Then the effect of conformity upon these responses was noted -- as shown in Table X, on the previous page.

As shown in the table, the improvement over chance in predicting the assignment of responsibility from knowing the degree of conformity is 16 per cent. The association is not strong, but it is in the expected direction. That is, a slightly greater proportion of teachers "high" on conformity tend to place primary responsibility upon the administration for initiating changes into the school organization. Teachers who are "low" on conformity are less likely to do so.

The Relationship between Commitment to Organizational Values and Conformity

We expected that very little association would exist between commitment to organizational values and conformity. Evidence in support of this expectation can be seen when we compare these two indices as shown in Table XI, following. A two-way measure of association was run on the data in Table XI. As shown in the table, no relationship appears to exist between the two indices. That is, conformity is just as likely to occur among teachers who are committed to organizational values as it is among teachers who are less committed to them.

TABLE XI

Association of Commitment to Organizational Values and Conformity*

Level of Conformity	Commitment Type			Total
	I (High)	II and III	IV (Low)	
High	12	21	15	48
Low	32	37	26	95
Total	44	58	41	143

*The strength of the association is indexed by $\lambda^{*}b = .00$.

Effects of Conformity upon Attitudes Expressed toward ITV

In considering the effects of conformity upon attitudes when controlling for use of ITV, the reader should bear in mind that non-conformity is not necessarily the obverse of conformity in the resulting attitudes expressed toward ITV. For example, the non-conforming "user" may be just as likely to hold positive attitudes as the conforming "user." That is, the non-conformist may have arrived at these attitudes independently of organizational norms. The crucial issue is whether or not these expressed attitudes are somehow influenced by conformity. We should expect that among non-conformers who are either "users" or "non-users" a fairly equal split should occur between favorable and unfavorable attitudes. Attitudes should more likely be polarized toward favoring ITV for users who are conformers. The evidence for this occurring is presented in Table XII, following.

TABLE XII

Distribution of Attitudes Expressed toward ITV by Conformity, Controlling for Use and Non-Use

Types of Teachers	Attitude toward ITV				Total Number
	Favorable		Unfavorable		
	%	No.	%	No.	
Users of ITV who are:					
Conformers	75	12	25	3	15
Non-Conformers . .	71	22	29	9	31
Non-Users of ITV whose conformity level is:					
High	20	3	80	12	15
Low	43.5	10	56.5	13	23

As shown in the table, the evidence is not as conclusive concerning the effects of conformity among users as it is among non-users. Among users, 75 per cent of the conformers expressed positive attitudes toward ITV while 71 per cent of the non-conformers also expressed positive attitudes. For non-users, among the conformers, 80 per cent expressed negative attitudes toward ITV while only 56.5 per cent of the non-conformers expressed similar attitudes.

When we did not control for ITV use, the relationship of conformity with attitudes expressed toward ITV yielded a λ*b value of .00 for both using and non-using schools. It appears that the effects of use or non-use cancel each other out when only the influence of conformity is considered with respect to attitudes expressed toward ITV.

TABLE XIII

The Effect of Conformity upon the Relationship of Use and Expressed Attitude toward ITV

Conformity Level and ITV Use	Expressed Attitude toward ITV		Total
	Favorable	Unfavorable	
High conformity and:			
Use of ITV	12	3	15
Non-Use of ITV . . .	3	12	15
Total	15	15	30
Low conformity and:			
Use of ITV	22	9	31
Non-Use of ITV . . .	10	13	23
Total	32	22	54

*Controlling for conformity, the strengths of the two use-attitude associations are indexed by λ*b = .600 for "high conformers," and by λ*b = .166 for "low conformers."

If it is true that the association between use exposure and attitudes is cancelled out by conformity because of the two opposing norms involved, then, if we control for conformity, the use-attitude relationship should be stronger for the conformers than for the non-conformers. Table XIII, on the previous page, shows the difference.

As shown in the table, for those teachers who are "high" conformers, the effects of ITV use upon attitudes expressed toward ITV result in a 60 per cent improvement of prediction over chance occurrence. This contrasts sharply with the 37 per cent improvement of prediction over chance when knowing only use-exposure (Table X, Chapter II). The effect of level of conformity is more striking when considered for those teachers labeled as "low conformers." The relationship of use-exposure and attitude is far stronger for the high conformers than for the low conformers -- .60 for high conformers *versus* .17 for low conformers. We had expected the conformers to have a stronger degree of association between use-exposure and attitude than those teachers who were highly committed to the values of the organization. This, however, was not the case, for both exhibited approximately the same percentage of improvement over chance prediction.

Summary and Conclusions

Evidence from the data generally supports our principal notions regarding the effects of commitment to the values and norms of the school organization upon attitudes expressed toward ITV. With respect to commitment to the *values* of the organization of the school, we found that among highly committed teachers, attitudes tended to be polarized in favor of ITV in schools where the decision had been made to use it. Somewhat unexpected were the findings in schools where ITV was not available. In these schools, a high degree of commitment tended to produce a leveling effect upon attitudes expressed toward ITV. We interpreted this to indicate an ambivalence toward ITV on the part of the administration rather than an outright rejection of its use. The implication underlying the effects of commitment at this level is that teachers, highly committed to the organization of the school, tended to identify with its policies. Such identity, in turn, influences teachers' perceptions of the degree of compatibility ITV holds for their roles. Compatibility, as we have previously pointed out, is a crucial concept in understanding the nature of attitudes towards, and acceptance of, any innovation.

A further indication of the influence of commitment to organizational values upon ITV attitudes was the finding that the relationship between use or non-use and attitudes was stronger for the highly committed than for the less committed teachers. A slightly different pattern of relationships existed for variations in commitment to specific role norms, or what we have labeled "conformity." Teachers who were highly committed to organizational values were not necessarily the same ones as those who were conformers.

In controlling for use or non-use, evidence regarding the effects of "conformity" was somewhat inconclusive for users of ITV. For non-users, however, the conformers were more likely to have negative attitudes toward ITV than the non-conformers. No relationship was found between conformity and attitudes, independent of use or non-use, in both "using" and "non-using" schools. After controlling for conformity, however, the use-attitude relationship was stronger for conformers than for non-conformers.

We had expected a more striking relationship among the conformers as contrasted with the teachers who were highly committed to the values of the organization. The findings, however, did not meet this expectation. Instead, the effects were approximately the same.

It appears that, while there may be considerable variation in attitudes expressed toward ITV and that these may be a function of compatibility defined independently of the school organization, evidence from our data supports the view that the more highly committed the teacher, to either the larger values of the school organization or only to the specific role norms, the more likely will her definitions of the compatibility of ITV with her role be identical with those of the administration of the school. This, we hold, provides an explanatory link between structural influences and the attitudes teachers express toward ITV.

CHAPTER IV

THE INFLUENCE OF FACTORS ASSOCIATED WITH THE CLASSROOM ROLE-SECTOR UPON ATTITUDES EXPRESSED TOWARD ITV

Introduction

In this chapter, we will consider the relationship existing between two different aspects of the teachers' classroom role sector and the attitudes expressed toward ITV. These aspects are (1) grade levels taught by the teachers, and the attitudes expressed toward ITV, and (2) the nature of role enactment within the classroom and its relevancy to ITV attitudes.

The Effects of Grade Level upon Attitudes Expressed toward ITV

It could well be that a major factor contributing to attitudes expressed toward ITV is the degree of compatibility of the ITV program offerings with the characteristics of the pupils in the teacher's grade level. If this were so, we would expect grade level to influence these attitudes. In running a test of association, the grade levels were split between the second and third grades because of a distinct break at this point in the array of teachers who are users and non-users of ITV. The strength of association between grade level and attitudes expressed toward ITV among teachers in "using schools" was indicated by a λ*b value of .23. The distribution is shown in Table I, on the following page.

TABLE I

Effect of Grade Level upon Attitude toward ITV in Schools where ITV Is Available*

Grade Level	Attitude toward ITV		Total
	Favorable	Unfavorable	
K - 2	10	18	28
3 - 9	34	17	51
Total	44	35	79

*Specialized teachers, teachers who knew nothing about ITV, and teachers who expressed neutral attitudes are excluded from this analysis. Of the latter group, there were 10 in schools where ITV was not available, and 16 in schools where ITV was available. The strength of the association shown is indexed by $\lambda^*b = .231$.

TABLE II

Effect of Grade Level upon Attitude toward ITV in Schools where ITV Is Not Available*

Grade Level	Attitude toward ITV		Total
	Favorable	Unfavorable	
K - 2	11	2	13
3 - 6	14	3	17
Total	25	5	30

*Only six grades are represented in these schools. Specialized teachers, teachers who knew nothing about ITV, and teachers who expressed neutral attitudes are excluded from this analysis. Of this latter group there were 10 in schools where ITV was not available, and 16 in schools where ITV was available. The expected "effect" is not obtained -- as indicated by $\lambda^*b = .00$.

Among the teachers at the second grade level there was a slightly greater likelihood of their not being favorable toward ITV. Among teachers working at the third grade level, there was a slightly greater likelihood of their being favorable toward ITV. There was no association between grade level taught and attitudes expressed toward ITV in schools where it was not available. This is indicated in Table II, on the previous page.

TABLE III

Effect of Grade Level upon Attitude toward ITV for "Using" and "Non-Using" Teachers*

Use of ITV and Grade Level	Attitude toward ITV		Total
	Favorable	Unfavorable	
"Using" Teachers:			
K - 2 . . .	7	3	10
3 - 9 . . .	25	7	32
Total	32	10	42
"Non-Using" Teachers:			
K - 2 . . .	3	15	18
3 - 9 . . .	9	10	19
Total	12	25	37

*Controlling for use and non-use, yielded λ*b = .00 in both cases -- i.e., no association between grade level and expressed attitudes toward ITV for teachers using or not using ITV.

Use or non-use remains the strongest influence upon attitudes expressed toward ITV. When we controlled for use and non-use, there was no association between grade level and attitudes expressed toward ITV. This is indicated in Table III, on the previous page.

Dividing the teachers into lower and upper grade levels does have an effect upon the use-attitude relationship, however. This is shown in Table IV, following. As indicated in Table IV, the use-attitude relationship is indicated by a λ*b value of .465 for teachers at the lower grades, while it is only .05 for teachers at the upper grade levels. These coefficients contrast sharply with the base, λ*b = . 37.

TABLE IV

The Effect of Use and Non-Use upon Attitude toward ITV, Controlling for Grade Level*

Grade Level and Use of ITV	Attitude toward ITV		Total
	Favorable	Unfavorable	
K to 2nd:			
Use	7	3	10
Non-Use . .	3	15	18
Total	10	18	28
3rd to 9th			
Use	25	7	32
Non-Use . .	9	10	19
Total	34	17	51

*Controlling for grade level, the use-attitude relationship is indexed by λ*b = .465 for the lower grade levels, and by λ*b = .054 at the upper grade levels.

It would appear that use of ITV at the lower grade levels occurs only under special circumstances when programs are suitable, since the majority of the teachers at this level do not use it. Polarization of attitudes at this level would subsequently be more likely a polarization based both upon the nature of the programs and administrative policies toward the use of ITV.

The Effect of Enactment of the Classroom Role-Sector upon Attitudes Expressed toward ITV

Thus far, we have viewed attitudes expressed toward ITV from the point of view of organizational effects in partially defining the degree to which ITV is viewed as compatible with the roles of the teacher. In the previous chapter, the intensity and type of commitment to the organization explained some of the reasons for the definition of compatibility. We have just seen that grade level also has some influence. But, in addition to these organizational effects, the teacher may also be free to define the degree to which ITV is compatible with the manner in which she carries out her role within the classroom, independent of organizational constraints. To this end, we should expect a teacher to be favorably disposed toward ITV if it is viewed as compatible with the manner in which she defines her classroom role.

The Indices

Scales were developed to provide measurements of four principle dimensions involved in the act of teaching. Each item in these scales had Lickert-type response alternatives ranging on a five-point scale from "completely agree" to "completely disagree." The scalings which were followed are discussed in detail in Appendix C. The dimensions and the items comprising the scales are described below.

Dimension 1. -- Emphasis placed upon social and emotional maturity *versus* emphasis placed upon pupil's knowledge and intellectual skills:

a. It is sufficient to leave growing up and maturing to the parents, but getting information on some subject matter across requires the skills of a competent teacher.

b. Today there is entirely too much emphasis upon learning facts and in acquiring knowledge, and not enough emphasis upon developing good citizenship skills.

c. At the grade level at which I teach, it is more important for the child to grasp a given amount of knowledge than to emphasize his social and emotional growth.

d. Given a choice, it would be better to spend time helping a child acquire knowledge or understanding of some lesson than in helping him get along with other children.

e. At my grade level, it is somewhat more important for a teacher to concentrate on developing a child's character than it is to concentrate on subject matter.

Dimension 2. -- Emphasis placed upon giving the pupil a high degree of individualized attention versus emphasis placed upon treating the pupils on an equalitarian basis:

a. As far as I am concerned, it is simply not true that individualized attention is essential at the elementary school level.

b. It has been my experience that a teacher must gear his or her behavior to the demands of the different kinds of children in the classroom. One way of doing things is usually insufficient.

c. For the grade level at which I am now teaching, individualized attention is the most effective teaching method -- even if it does require smaller classes.

Dimension 3. -- Emphasis placed upon giving the pupil close emotional support versus emphasis placed upon maintaining an emotional distance from the pupil:

a. I can usually accomplish more by remaining somewhat aloof from the children in my classes.

b. For my classes, it is generally the case that getting too close to the children emotionally interferes with whatever it may be that I am trying to accomplish.

c. Take away the close emotional support that a teacher can provide children in the elementary school, and you might just as well have a machine in the classroom.

Dimension 4. -- Emphasis placed upon maintaining a high degree of control of pupils versus emphasis placed upon conducting the class in a permissive atmosphere:

a. At least for myself, tight control in the classroom is essential at all times.

b. On the whole, it is undesirable to restrict children with many rules and regulations.

c. Children at the grade level at which I teach are too young to be given much freedom.

d. Give a child an inch and he will take a mile.

e. The greater the freedom given to a child, the greater is the opportunity for him to live up to his potential.

Expected Findings

Our expected findings of the effects of the four dimensions and the supporting rationale are as follows:

1. Teachers who are favorable toward ITV will be more likely to place emphasis upon the pupil's acquisition of knowledge than upon developing his social and emotional maturity. There will be an opposite emphasis by teachers who are unfavorable toward ITV. The rationale for this expectation is that ITV is a teaching device designed to add to the viewer's fund of knowledge, hence those teachers favorable toward ITV should also be those who emphasize this aspect of instruction.

2. Teachers favorable toward ITV will place less emphasis upon individualized attention in contrast with teachers who are unfavorable toward ITV. This expectation is predicated upon the fact that the programming of ITV is based upon some modally-derived determination of the characteristics of pupils. Such an orientation cannot possibly allow for individual differences. Thus, those teachers who are favorable toward ITV will likely be those who view individualized attention as relatively unimportant.

3. Teachers who are favorable toward ITV will likely be more permissive in classroom control than those teachers who are unfavorable toward ITV. The rationale for this expectation is that, with the operation of ITV, the teacher loses her position as the referent of attention. The potential distractions of ITV, instead of the customary manner of conducting the class, will require a more permissive orientation toward the pupils. Those teachers who are favorable toward ITV will thus likely be those who, because of their permissive orientation within the classroom, are able to make allowances for any perceived potential disruptions that may occur with ITV's use.

4. Teachers who are favorable toward ITV will more likely be emotionally distant from their pupils in contrast with those teachers who are unfavorable toward ITV. The reasoning behind this expectation is basically the same as the second-listed expectation, on the previous page. Because of the nature of ITV, it cannot be expected to provide emotional support to the child viewing it. The appeal of ITV is thus expected to be associated with those teachers who do not stress emotional support in their classroom conduct.

Findings

Only two of the four dimensions could be scaled. These were the dimensions of "control" and "emotional support." There was little differentiation on the other two dimensions. Most of the teachers' responses showed an emphasis upon developing the pupils' social and emotional maturity and providing close individualized attention.

With respect to the dimensions "control" and "emotional support," seven scored groups emerged for the former, and six for the latter. These score groups are interval scales but, because of the small number of cases involved in the analysis, it was felt that medians would be more stable than means, and that they would be adequately descriptive of the distances between groups on the scaled dimensions. Hence the analysis will involve the median score for favorable, unfavorable, and neutral attitudes toward ITV. The medians are plotted separately for "users," "non-users," and the "not available" categories. The median score then represents the degree of commitment for each group, and we expect that such commitment is related to the degree to which ITV is likely to be perceived as compatible with the teacher's role enactment.

There was a slight positive correlation between the two dimensions of "control" and "emotional support." With a Pearsonian "r" of .21, four per cent of the variance of either of the two scales can be explained by knowing the score value of the other scale. While it was quite unexpected that a high degree "emotional support" should be associated with strict control, the strength of the association is so slight as to permit their separate consideration.

In the data analysis, each of the three attitude groups was considered separately for both scales. Figure 1, on the next page, presents the median plots of these groups for control.

For teachers in schools where ITV was not available, those who were "favorable" and "neutral" toward ITV scored "high" on control, while those who were unfavorable were more permissive, scoring low on control. This finding contrasts with our expectations. In view of these findings, it may be reasonable to assume that those teachers unfamiliar with ITV saw nothing incompatible between its use and the fact that they tended to exercise strict control in their classrooms. The small number of cases which were unfavorable, however, makes this assumption highly speculative.

For both "users" and "non-users" of ITV, those who were favorable toward its use scored lower on the control scale than those unfavorable. This finding is consistent with our expectations. However, opposite patterns emerged between the two groups for those teachers who were neutral. For non-users, the neutrals were highest on control, while for users, the neutrals were lowest. These findings do not afford a simple interpretation, caused in part by the relatively small difference in median scores on control between "favorables" and "neutrals" for the users, and by the relatively small difference in median scores between "neutrals" and "unfavorables" for the non-users. The small number of cases in the neutral groups adds further to the difficulty of interpretation.

It will be recalled that the rationale for the expected relationship between teachers' permissiveness in the classroom and their favorable attitude toward ITV was that there would be a

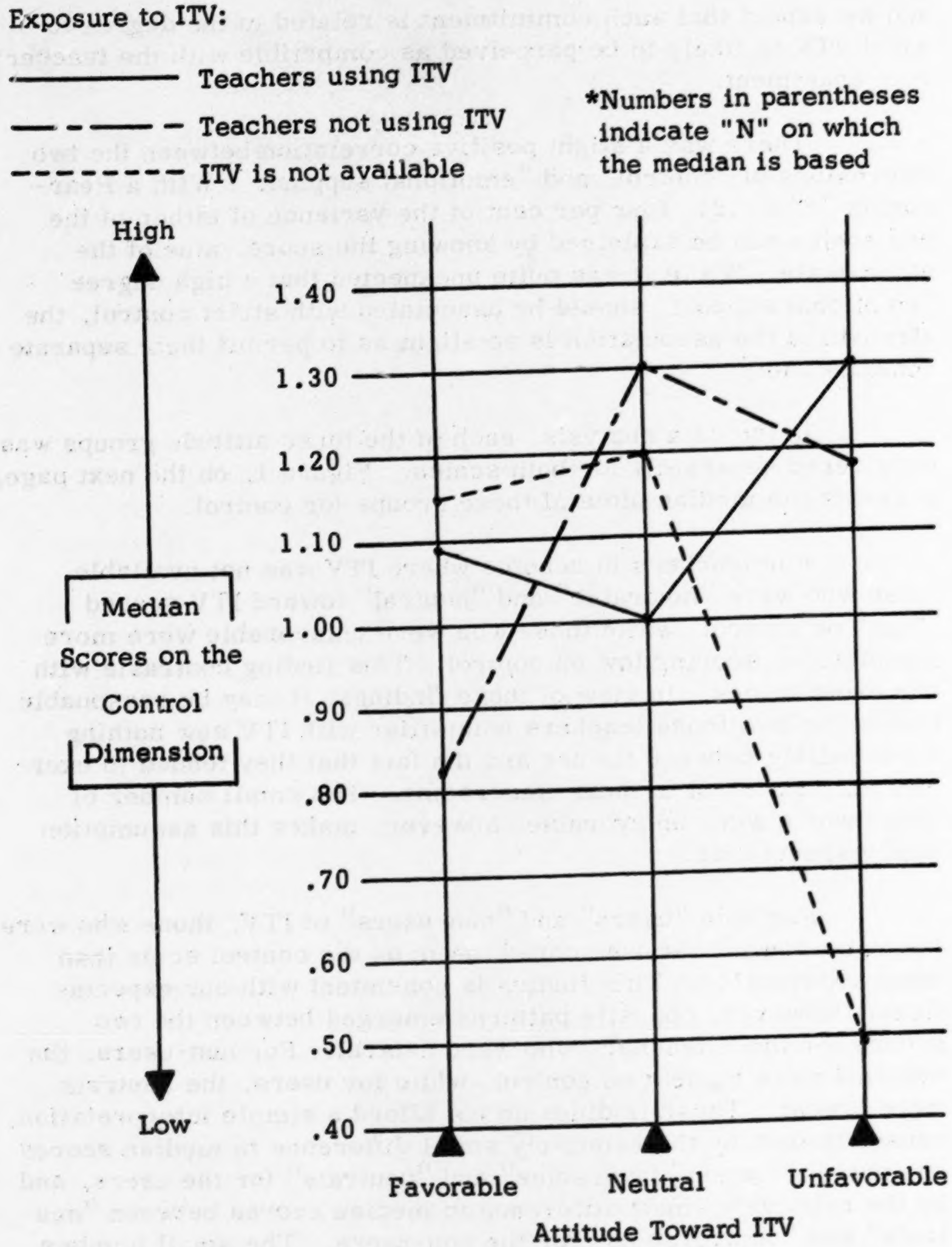


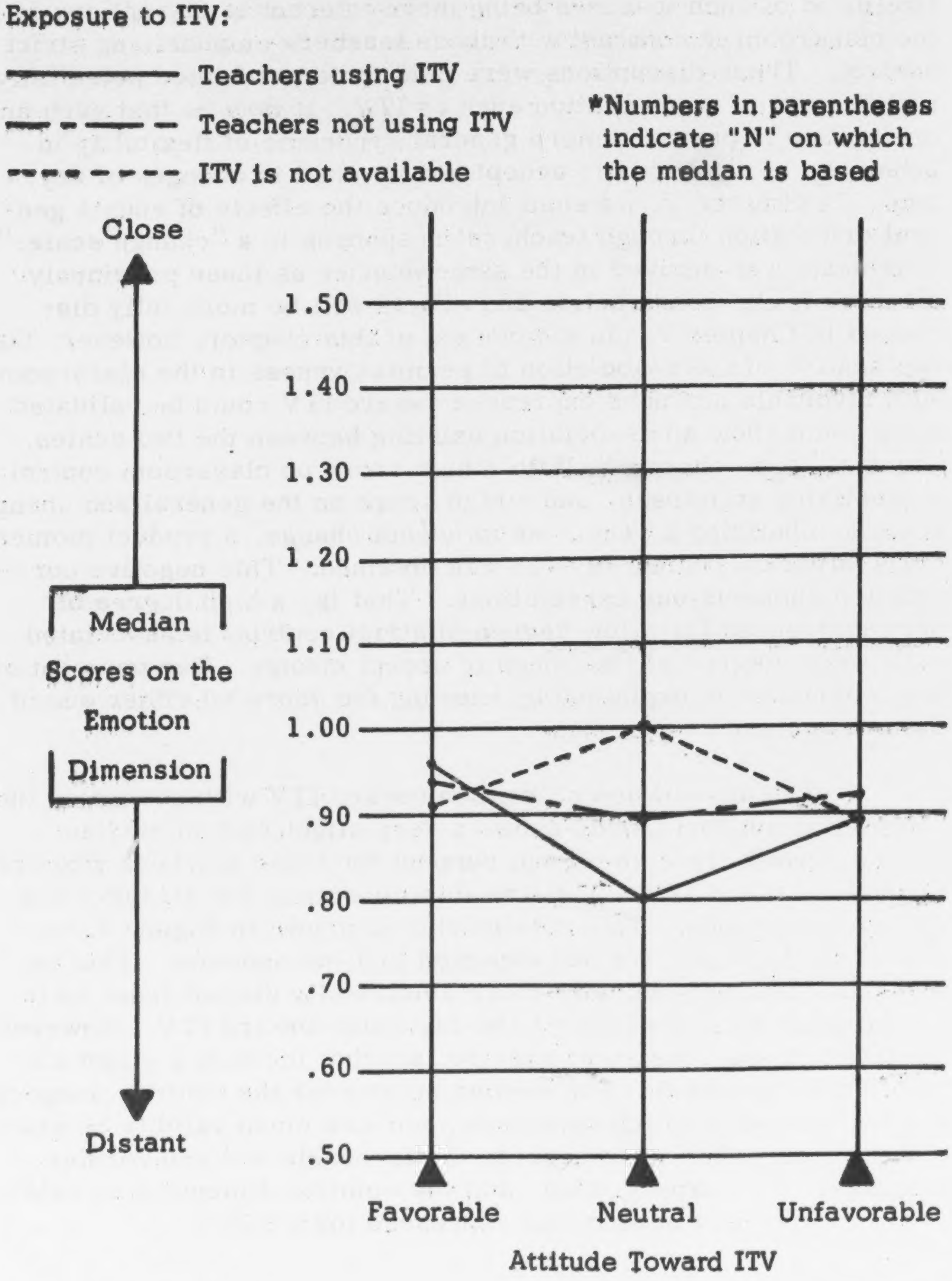
Figure 1.--Median Scores on the Control Dimension by Attitude and Use.

likelihood of such teachers being more tolerant of disruptions in the classroom in contrast with those teachers emphasizing strict control. These disruptions were held to be associated potentially with the use of an innovation such as ITV. It may be that such an orientation is part of a more general syndrome of flexibility in behavior, of readiness to accept and to adapt to changes of any type. In Chapter V, we shall introduce the effects of such a general orientation through teachers' responses to a "change scale." This scale was derived in the same manner as those previously discussed. Its construction and effects will be more fully discussed in Chapter V. In the context of this chapter, however, the explanation of the association of permissiveness in the classroom with favorable attitudes expressed toward ITV could be validated if we could show an association existing between the two scales, "control" and "change." With a high score on classroom control symbolizing strictness, and a high score on the generalized change scale symbolizing a readiness to accept change, a product moment correlation coefficient of -.33 was obtained. This negative correlation supports our expectations. That is, a high degree of permissiveness (or a low degree of strict control) is associated with a high degree of readiness to accept change. Ten per cent of the covariance is explained by knowing the score on either one of the two scales.

The association of attitude toward ITV with scores on the "emotional support" scale shows a very slight rise in median scores toward close emotional support for those teachers who are favorable toward ITV. This trend is consistent for all three use-experience groups. This relationship is shown in Figure 2, on the following page. We had expected just the opposite. That is, that those teachers who are more emotionally distant from their pupils would be more likely to be favorable toward ITV. However, the findings are consistent with the fact that there is a slight correlation with control. The median scores for the neutral category are not amenable to interpretation, nor can much validity be placed on the small differences between the favorable and unfavorable teachers. We suspect, then, that the emotion dimension is relatively independent of attitudes expressed toward ITV.

Summary

In this chapter, we considered the role of grade level in defining the degree of compatibility of ITV with the teachers' role norms. We have shown that in schools which have not adopted



*Numbers in parentheses indicate "N" on which the median is based

Figure 2.--Median Scores on the Emotion Dimension by Attitude and Use.

ITV, no association occurs between grade level and attitudes expressed toward ITV. In schools where ITV was adopted, grade level was found to influence attitudes expressed toward ITV. Teachers at lower grade levels were more likely to be unfavorable toward ITV, while teachers at grade levels above the second grade were more likely to be favorable toward it.

When controlling for grade level, users of ITV were more likely to be favorable and non-users unfavorable among the lower grades than among the upper grade levels. There was no influence of grade level upon attitudes expressed toward ITV in schools where it was not available. While grade level was held to define, in part, the degree of compatibility of ITV with the classroom role sector in schools where ITV was available, its effects upon attitudes disappeared when controls for use were introduced.

In addition to a consideration of the degree to which grade level contributes to definitions of compatibility, four dimensions of role enactment in the classroom were derived. Only one dimension -- degree of control exercised within the classroom -- appeared to be clearly associated with attitudes expressed toward ITV. Validation was sought in order to explain why scale scores reflecting a comparatively greater emphasis upon permissiveness in the classroom were associated with favorable attitudes directed toward ITV. We discovered that an emphasis on permissiveness was part of a general syndrome of flexibility of behavior and a readiness to accept and to adapt to change. The control scale scores were found to be associated with scores on a "generalized" change scale.

With respect to the other three dimensions, teachers were found to be largely in agreement in their tendency to emphasize guiding the child toward social and emotional maturity and giving individual attention to each of their pupils. While there existed a differentiation among teachers in their responses to the emphasis placed upon providing emotional support to their pupils, this difference was shown to have relatively little association with attitudes expressed toward ITV.

CHAPTER V

EXTRA - ORGANIZATIONAL INFLUENCES UPON THE ACCEPTANCE OF CHANGE: PREVIOUS EXPERIENCES AND THE PROFESSIONAL ROLE SECTOR

Introduction

In previous chapters, we have discussed the effects of commitment and compatibility upon the acceptance of ITV, taking as our focus of attention the organizational and classroom role sectors. In the present chapter, we examine the impact of "extra-organizational" factors upon the acceptance of change. The extra-organizational factors that we shall be concerned with are those experiences and orientations that a teacher may bring into the organizational setting of the school and which influence the acceptance or rejection of changes in general. We shall consider two principal extra-organizational influences upon the acceptance of change, namely, the previous experiences of the teacher, and commitment to the professional role sector.

Extra-Organizational Influences on Attitudes toward ITV

It is reasonable to suppose that people do not all see the relationship between a given change and the given role norms of the organization in precisely the same way. We can expect that some teachers generally tend to experience more changes as compatible than as incompatible and vice versa. Such generalized orientations to change ought to have some influence on an individual's acceptance or rejection of any particular change -- including any change in occupational expertise. However, we should not expect an individual to accept or to reject a given change solely on the basis of his generalized orientation to change. Acceptance or rejection of a given change would depend, in part, upon those attributes that are directly associated with that change. In fact, we would be inclined to expect that the specific characteristics of any particular change and the conditions surrounding its use might, as a result of an individual's more intimate connection with the change and with the role behavior, be more important in influencing the perception of compatibilities and incompatibilities than would a generalized orientation.

These dispositions to accept or to reject changes, which the individual teacher brings into the organizational setting and with which he or she confronts the specific characteristics of the change and of the conditions surrounding its use, might be produced by a number of experiences outside the school itself. In this chapter, we will examine the effect upon the acceptance of changes of two such sets of extra-organizational experiences -- namely, the past experiences of the teachers, and their commitment to their professional role sector.

Previous Experiences

An orientation to accept or to reject changes might be the consequence of any number of experiences that the teachers might have had in the past. Prior commitment to norms from an earlier stage of life that bear upon the acceptance of changes, previous successful or unsuccessful experiences with changes, different abilities or skills in coping with changes, the development of established and comfortable ways of carrying out one's duties, all could lead to a differential readiness to accept or to reject changes in occupational expertise. Such factors are not produced at random within a population. They are, rather, patterned in accordance with a number of "standard" sociological variables such as age, socio-economic level, and community of origin. In fact, there is evidence from previous research to indicate that all of these factors, or the experiences associated with them, are related to the acceptance of change. Faunce found that a greater readiness to accept changes was associated with "higher class background and identification" and an urban background.[1] Trumbo presented data which suggest that there may be a curvilinear relationship between readiness to accept changes and age -- with the youngest and the oldest least ready to accept changes.[2] Rogers, summarizing findings from the literature on the adoption of innovations, reported that earlier adopters tend to be of higher social status, somewhat younger, and better educated than later adopters.[3]

In the following section we shall examine the effects of age, socio-economic background, and community of origin upon attitudes toward ITV, using three indices: length of time teaching, father's education, and size of community of origin.

Length of Time Teaching -- There are several reasons for believing that the acceptance of change could be associated with the length of time in teaching. First, it is possible that those who have been in the profession for a number of years have, for one reason or another, personality characteristics that differ systematically from those who have been in the profession for less time. Indeed, in Chapter II, it was observed that older teachers emphasized security in their value orientations; and it is reasonable to suppose that, as a concern for security increases, readiness to change decreases. Second, greater time in the profession might lead to a reluctance to change established patterns for carrying out one's role. Third, greater length of time in teaching may be associated with a current commitment to change norms prevalent at an *earlier* stage of a teacher's career and which might differ from current norms governing changes.

Length of time in teaching rather than age will be used as an index since it is more directly linked to actual role performance. However, the two measures are highly associated: $\lambda *b = .69$

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[1] William A. Faunce, "Social Stratification and Attitude toward Change in Job Content," *Social Forces*, XXXIX (December, 1960), 140-148.

[2] Don A. Trumbo, "Individual and Group Correlates of Attitudes toward Work-Related Change," *Journal of Applied Psychology,* VL (May, 1961), 338-344.

[3] Rogers, *op. cit.*, p. 72.

for both variables divided at the median.[1] The median break for number of years taught gave us a "low" group of from 1 to 13 years in teaching, and a "high" group in teaching for 13 to 47 years.

Father's Education -- It was expected that differences in the socio-economic backgrounds of the teachers might have imparted skills or have been the source of experiences which would affect their readiness to accept change. For example, such things as the quality of education, knowledge of the working of society, the number or types of changes experienced, success in coping with changes at the family level, and so on, might all contribute to a generalized orientation toward changes. All of these factors would be expected to vary with socio-economic level. The level of fathers' education was taken as an index of socio-economic level. Teachers whose fathers had some college or better were placed in a "high" group and those whose fathers had had no college experience were placed in a "low" group.

Size of Community of Origin -- In general, we expected that the larger the community of origin, the greater would be the exposure to and the experiences with change, and the more favorable would be the prevailing community norms regarding change. The degree of urban experience was assessed by dividing teachers on the basis of their communities of residence during their last two years in high school. The two groups were: Those who lived on a farm or in a city with a population of less than 100,000, and those from larger cities or urban areas.

Findings: Attitudes and Experiences -- Among teachers in schools where ITV was available, there was no association between attitude toward ITV and any of the three indices of past experience.[2] (These tables are not shown.) However, the three indices did have some effect upon the strength of the use-attitude relationship. The strength of the association, λ^*b, for the use-attitude relationship for each level of the three indices is presented in Table I. The degree and direction of the differences from the standard λ^*b of .37 are also given.

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[1] This association is based on a symmetrical relationship. It may be viewed as the case where the individual is held to be chosen at random from a given population. The problem is to predict the "A" class and the "B" class. The coefficient indicates the improvement in predicting the class of the individual knowing the class other than the one being predicted over knowing nothing about that class.

[2] Teachers in schools where ITV was not available are not considered in this part of the analysis since all but six were favorable toward ITV.

TABLE I

The Effects of Use, Non-Use upon Attitudes Expressed toward ITV for Three Measures of Past Experience

Past Experience	Size of λ^*b for the Use-Attitude Relationship	Difference from the Standard λ^*b of .37
Length of Time Teaching:		
1 to 13 years	.38	+.01
13 years or more	.32	-.05
Level of Father's Education:		
Some college or more	.24	-.13
High school or less	.38	+.01
Size of Community of Origin:		
Urban	.21	-.16
Rural or small city	.46	+.09

The strength of the use-attitude relationship appears to be about the same regardless of the length of time that the teacher has been teaching. The λ^*b's for this index also do not appear to differ much from the standard λ^*b of .37. The strength of the use-attitude relationship was less than the standard for those teachers who came from families where the fathers had attained relatively high educational levels. For those teachers whose fathers had relatively lower levels of education, the strength of the use-attitude relation was nearly equal to the standard. Having an urban or a large city origin leads to a strength of association for the use-attitude relationship that is less than the standard .37. For teachers of rural or small city origin, the relationship exceeds the standard.

The lack of any effect of length of time teaching, fathers' education, and community of origin upon attitude toward ITV is not consistent with previously cited research which found measures of similar variables to be associated with readiness to accept or to reject changes. Since, later in this chapter, other data will be presented which attest to the validity of these three indices, we can tentatively assume that this lack of relationship is due to other causes. It is possible that the strong association between use and non-use and attitude toward ITV offsets any impact that these indices would ordinarily have upon the acceptance of a change. This interpretation is supported by observing that the indices do have some effect upon the strength of the use-attitude relationship. That is, they affect attitude when use or non-use is taken into account. The nature of this impact upon the use-attitude relationship is, however, not clear cut. Lacking any consistent pattern, no firm conclusions are possible in this connection although further consideration will be given to these data later in the chapter in connection with additional findings. Finally, the lack of consistency itself may simply reflect the relative efficiency of the three indices, but we have no way of determining if this might be the case.

The Professional Role Sector

The second major set of extra-organizational experiences which may influence the teacher's acceptance or rejection of changes is the teacher's commitment to the professional role sector. In Chapter I, we observed that the structure of an occupation, the nature and distribution of its change norms within that structure, and the pattern of commitment to that structure, ought to be of special significance for the way in which changes are accepted by the members of that occupation. In the two preceding chapters we discussed two segments of the occupational structure, the organization and classroom role sectors, in relation to their effect upon the acceptance of ITV. In this section, we shall be concerned with the teacher's commitment to the "professional role sector." That is, we shall be concerned with the teacher's commitment to that portion of the occupational structure which is primarily concerned with the training of teachers and with the development and transmission of occupational expertise.

Within the professional role sector, we are primarily interested in those organizations which have a major impact on the definition, creation, preservation, and dissemination of the occupational expertise. In education, these formative and distributive functions accrue mainly to two segments of the occupational structure: the professional associations, and those organizations concerned with teacher education. While it is true that the organizational and the classroom role sectors exert an influence upon the development of the occupational expertise of teachers, they do so less formally and to a lesser degree than the professional and the educational organizations which are specifically charged with this task.

Rationale of Change Acceptance or Rejection -- In this report, the general plan of analysis has been to show that differential acceptance of occupationally-related change is a function of the perceived compatibility or incompatibility between the change and norms governing various portions of the occupational role as well as the differential commitment to these norms. We suggested that those norms that explicitly refer to the acceptance or rejection of changes in expertise were especially important. When such norms expressly favor the adoption of legitimate changes and where individuals are committed to these norms, then a legitimate change will be perceived as compatible. Where the norms expressly proscribe the acceptance of changes, or of certain kinds of changes, for individuals who are committed to those norms, then such changes will be perceived as incompatible. Now, if differential commitment to the professional role sector is to have any consequence for the acceptance of changes in the expertise of the public elementary school teacher, it is necessary to show that the norms of the professional and the teacher education organization are such as to encourage or discourage the acceptance of changing expertise.

The occupational expertise of teaching involves the transmission of information and knowledge by means of special techniques and procedures. That this expertise has, in the United States, undergone substantial change and alteration in the twentieth century can scarcely be doubted from even a cursory glance at the history of American education.[1]

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[1] Cf., Lawrence A. Cremin, The Transformation of the School (New York: Alfred A. Knopf, 1961) and I. L. Kandel, American Education in the Twentieth Century (Cambridge, Mass.: Harvard University Press, 1957).

This, in itself, suggests the presence within the educational structure of norms favorable to the introduction of changes, i. e., "improvements," in the occupational expertise of elementary education. Norms which express the necessity and obligations of teachers to keep abreast of these developments and changes are present both within schools of education and within professional associations. These norms are therefore available as potential sources of orientations for the role behavior of the teachers committed to these groups.

Norms of Professional Groups -- An examination of official and unofficial publications which explain the goals of professional associations and of professional behavior leaves little doubt that among the professed norms of these organizations are: (1) the encouragement and dissemination of changes in the occupational expertise, and (2) the encouragement of the mastery of these changes by teachers through facilities and activities of these organizations -- publications, conferences, workshops, and through continuing academic course work.[1]

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[1] For example, an official publication of the Educational Policies Commission of the National Education Association and the American Association of School Administrators states:

> The first commitment of a professional organization is to preserve, utilize, and expand the body of special knowledge and insight of which the profession is custodian. . . .

and further,

> The mark of the professional person in education is his knowledge, and the essential business of the profession concerns this knowledge. Organizations in education may, therefore, be appraised in terms of the ways in which they cultivate professional knowledge in their members, assist in its growth, and contribute to its dissemination and application in practice.*

*Educational Policies Commission, Professional Organizations in American Education (Washington, D. C.: National Education Association of the United States, 1957), pp. 27 and 32. Similar statements are also to be found in T. M. Stinnett, The Teacher and Professional Organizations (Washington, D. C.: National Commission on Teacher Education and Professional Standards, National Education Association of the United States, 1956), which is a volume designed ". . . for use in the professional orientation phases of college and university preservice teacher education programs."

Even as early as 1923, at a time when the scientific movement in education had just begun to exert an influence[1] and when the NEA had just begun to assume its present size and identification as a professional association,[2] the presence of these norms was already discernible. An elementary education text of that time advises teachers that there are no fixed methods in education, and that they will need to keep up with new developments.[3] This emphasis on changing expertise and the necessity for teachers to stay alert and to adapt to changes continues to the present time where it becomes merged with explicit admonitions to keep abreast of current developments through professional reading, participation in professional organizations, and formal course work. But to know that teachers have been exposed to statements of norms favorable to the acceptance of change does not explain why teachers differ with respect to how well they accept it. As far as the acceptance of change is concerned, the assumption is made that norms favoring legitimate changes[4] in the occupational expertise of the public elementary school teacher are present in professional teaching associations and in schools of education.[5] Commitment to these groups implies the likely acceptance of these norms and hence the acceptance of legitimate changes such as instructional television.

Commitment to Professional Association Index -- This index attempts to reflect the degree of importance placed upon the norms and the activities associated with a number of professional associations by means of the teachers' perceived involvement in these organizations. In the questionnaire, teachers were asked to indicate one of five possible "relationships" that they had to six professional associations. The five relationships and the index weights assigned to them were:

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[1] Lawrence A. Cremin, The Transformation of the School (New York: Alfred A. Knopf, Inc., 1961), p. 179ff.

[2] Lieberman, op. cit., p. 261.

[3] ". . . For, ultimately, expertness in education means ability to participate in the solution of unsolved problems rather than the knowledge of laws and procedures," is a representative statement. John Louis Horn, The American Elementary School (New York: The Century Company, 1923), p. 9. For similar comments, see pp. 9-11.

[4] Changes are defined as "improvements" by administrators and individuals regarded in the profession as educational experts.

[5] All of this is not to say that these norms are necessarily the dominant ones within these groups but merely that they are present.

Relationship	Weight
I am a member and an active participant	1
I am a member and have an interest in the organization, but I am not an active participant	2
I am a member, but have no particular interest in the organization	1
I am not a member now, but I have an interest in the organization and plan to join	0
I am not a member of the organization, nor do I plan to join	0

The six professional associations were: American Federation of Teachers, Association for Childhood Education, Department of Classroom Teachers, Local Education Association, the State Education Association, and the National Education Association. Each teacher's index score is the summed relationship weights of the six professional associations.

Commitment to Teacher Education Index -- Commitment to the education institutions responsible for the transmission of professional expertise to public school elementary teachers is measured by the amount of the teachers' education. In the questionnaire, teachers were asked to indicate the academic degree that they presently held and any advanced degree for which they might presently be working. For purposes of the analysis, respondents were placed into two categories on this index: Those teachers who had, or who were, working toward a degree beyond the B. A. were regarded as having "high commitment" to teacher education organizations; those with a B. A., or less than a B. A., were regarded as having "low commitment."

It is recognized that the index omits an important area of teacher training, namely, in-service education. Unfortunately, no measure of the amount of in-service instruction that each teacher had received was available for the construction of the index. Nevertheless, by separating teachers with a B. A. or less from those who have been or are working toward a degree beyond the B. A., the index does reflect relative amounts of one kind of formal participation in teacher education.

Findings: Professional Commitment -- Unlike the three measures of past experience (length of time in teaching, level of father's education, and size of community of origin) which had no effect upon attitudes expressed toward ITV, both commitment to professional associations and commitment to teacher education do have some effect. Commitment to professional associations showed only a very slight relationship to attitude toward ITV, $\lambda^{*}b = .05$. Commitment to teacher education had a somewhat greater association, $\lambda^{*}b = .13$, although in a direction contrary to expectation -- the teachers with higher educational commitment were somewhat *less* likely to be favorable toward ITV than those with lower educational commitment.

It is difficult to say why past experience should have no effect and commitment to professional associations only a very slight effect upon attitudes toward ITV, while higher commitment to teacher education should reduce favorable attitudes toward ITV. However, in Table II, on the following page, it can be seen that *both* high and low commitment to teacher education *reduce* the use-attitude relationship below the standard $\lambda^{*}b$ value of .37, while *only* low commitment to professional associations shows a similar reduction. Again, as was the case with the three indices of past experience, the lack of a consistent pattern for all of the extra-organizational influences makes interpretation difficult. However, the fact that only commitment to teacher education had an impact *both* on attitude toward ITV and on the use-attitude relationship leads us to suspect that, of the three past experience indices and of the two indices of commitment to the professional role, commitment to teacher education has the most important extra-organizational influence upon the acceptance of this specific change. Unfortunately, we lack sufficient cases to be able to introduce the additional controls needed to determine whether there is a basis for these observations.

TABLE II

The Effects of Commitment to Professional Associations and to Teacher Education upon Attitudes Expressed toward ITV

Object and Degree of Commitment	Size of λ^*b for the Use-Attitude Relationship	Difference from the Standard λ^*b of .37
Professional Association:		
High	.34	-.03
Low	.21	-.16
Teacher Education:		
High	.11	-.26
Low	.23	-.14

However, as was suggested earlier in this chapter, the acceptance or rejection of a specific change would depend in part (and perhaps in large part) upon those specific attributes which were directly associated with that particular change as well as upon a generalized orientation toward change which we assume to be a function of our extra-organizational indices. Hence, we may speculate that interaction among the indices of the various extra-organizational experiences and the specific attributes of ITV (which would have varied with the use and non-use categories) could have introduced enough "noise" into our results to obscure any consistent pattern of relationship between the extra-organizational indices and the strength of the use-attitude relationship. It must also be borne in mind that the dichotomy of "favorable" and "unfavorable" attitudes toward ITV is no more than a crude measure of the actual degree of acceptance of ITV. No doubt there is a certain amount of distortion entering these results from this source. In fact, as we shall see in the following section, when these same indices of extra-organizational influences are coupled with a measure of the general orientation to change (the Change Scale) which allows for finer attitude discriminations and for which, theoretically at least, there is no set of specific attributes analogous to those associated with ITV, a much more consistent pattern of results is obtained.

Generalized Orientation toward Change: The Change Scale

Up to this point, we have been concerned with the acceptance of one specific change, ITV. We have argued that its acceptance depended upon the degree of perceived compatibility or incompatibility between it and sectors of the total teaching role to which the teachers are committed in varying degrees. Now, as we have already suggested, it is highly likely that many of the factors which are associated with perceptions of ITV as being either compatible or incompatible with sectors of the teaching role (such as use or non-use of ITV) are unique to ITV. That is, we would not expect each attribute of ITV to be associated with every possible change in the expertise of teaching. But if unique or specific factors associated with ITV have contributed to the teachers' perception of it as compatible or incompatible, what can be said of teachers' perceptions of other possible changes? In short, what can we say about teachers' acceptance or rejection of changes in general?

General Orientation toward Change

Already in this chapter, we have proposed that individuals might bring their own generalized orientations toward change into particular change situations. And, in the preceding section, we discussed two sets of extra-organizational factors, past experience and commitment to the professional role sector, which we believed might produce such generalized orientations toward change, and which previous research had shown to be associated with the acceptance of change. We examined the effect of these extra-organizational factors upon attitudes towards ITV, and the effect was, we found, far from clear. It was suggested that this lack of a clear relationship might be due to perceptions of the compatibility or incompatibility of unique attributes associated with ITV, and that these perceptions had distorted the effect of general orientations toward change.

In this section we will introduce a measure of this general orientation toward change, the Change Scale. We shall assume that, just as specific factors associated with ITV led to its being perceived as compatible or as incompatible, similarly less immediate and more "diffuse" factors, such as past experience and commitment to the professional role sector, are the experiences in which a general orientation toward change is grounded. Thus, we expect that the factors which were unique to ITV, and which presumably affected attitudes toward it, would not have a similar effect upon general orientations toward change. On the other hand, we do not expect that acceptance of a specific change, such as ITV, would be entirely independent of a general orientation toward change because the acceptance or rejection of ITV is a specific instance of the acceptance or rejection of changes in general.

In sum (and, for the present, assuming commitment to norms to be constant), acceptance of a specific change depends upon: (1) specific factors -- perceived compatibility or incompatibility between specific attributes of the change and specific norms governing some area of role performance, and (2) general factors -- such as the various extra-organizational experiences which result in a generalized orientation toward change. Acceptance of changes in general, however, depends upon the general extra-organization experiences but not necessarily upon those specific factors which are associated with any given change.

But if the foregoing observations are correct, how are we to explain the inconclusive results of the relationship between the extra-organizational factors (which are presumably associated with a general orientation toward change) and the measure of the acceptance of a specific change, namely, attitude toward ITV? We have already offered one explanation for the lack of consistent findings: the possibility that the general orientation to change was confounded by factors associated with the specific change. There is also another possibility: the measures of extra-organizational factors were just that. Namely, they were measures of factors and experiences which supposedly would have an impact upon general orientations toward changes but which were not themselves indices of a general orientation. When we look at the relationship between these same extra-organizational factors and the Change Scale, which does purport to be an index of a general orientation toward change, a more consistent pattern will emerge.

Nature of the Change Scale

The Change Scale consists of the following eight items to which the teachers could indicate five degrees of agreement -- strongly agree, agree a little, neither agree nor disagree, disagree a little, or strongly disagree:

1. If I could do as I pleased, I would change the kind of work I do every few months.

2. I would prefer to stay with a job I know I can handle than change to one where most things would be new to me.

3. I enjoy trying out new teaching techniques and devices in the classroom.

4. When I get used to doing things in one way, it is disturbing to have to change to a new method.

5. No amount of money could entice me away from teaching. Teaching offers rewards that money cannot buy.

6. The trouble with most jobs is that you must get used to doing things in one way, and then they want you to do them differently.

7. The trouble with many people is that when they find a job they can do well, they do not stick with it.

8. I like a job where I know that I will be doing my work about the same way from one week to the next.

The same items, but with slightly different wording and a different scaling procedure, have been used previously.[1] The scaling procedure used in the present study is discussed in Appendix B.

In agreement with the preceding remarks, if the Change Scale is in fact a measure of a generalized orientation toward change then we should expect to find support for the three relationships outlined below.

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[1] Faunce, op. cit., and Trumbo, op. cit.

First, because acceptance or rejection of ITV is an instance of the acceptance or rejection of changes in general, the Change Scale scores of those who accept the specific change (ITV) will be higher than the scores of those who reject it.

Second, attributes that are presumed to be unique to a specific instance of a change, and which affect the perceived compatibility or incompatibility of that change, ought to have no impact upon general orientations toward change. Hence, since it has been shown that acceptance of ITV is affected by factors which are unique to ITV (e. g., the use and non-use or non-availability of ITV), we should find that -- regardless of whether the teacher uses, does not use, or does not have ITV available -- favorable attitudes toward ITV will be associated with higher Change Scale scores and unfavorable attitudes toward ITV will be associated with lower Change Scale scores.

Third, because the extra-organizational factors of past experience and commitment to the professional role sector are believed to affect generalized orientations toward change, we should expect that a higher level of father's education, larger community of origin, fewer years in the teaching profession, and high commitment to teacher education and to professional associations will be associated with higher Change Scale scores.

Findings: Generalized Orientation toward Change

In Figure 1, on the following page, the relationships among the median Change Scale scores of teachers having positive, negative, and neutral attitudes toward ITV are presented in terms of the categories using ITV, not-using ITV, and ITV not available. As expected, the median Change Scale scores of teachers with positive attitudes is higher than for teachers with negative attitudes toward ITV -- regardless of whether the teachers had used, had not used, or did not have ITV available in their schools. It is also to be noted that teachers whose attitudes toward ITV were classified as neutral have median Change Scale scores which fall between those of teachers with positive and negative attitudes toward ITV. Thus it seems that a general orientation to accept changes is associated with a greater readiness to accept the specific change ITV, and that attributes which are unique to the specific change and which do affect attitudes toward it appear to have no effect upon the general orientation toward change.

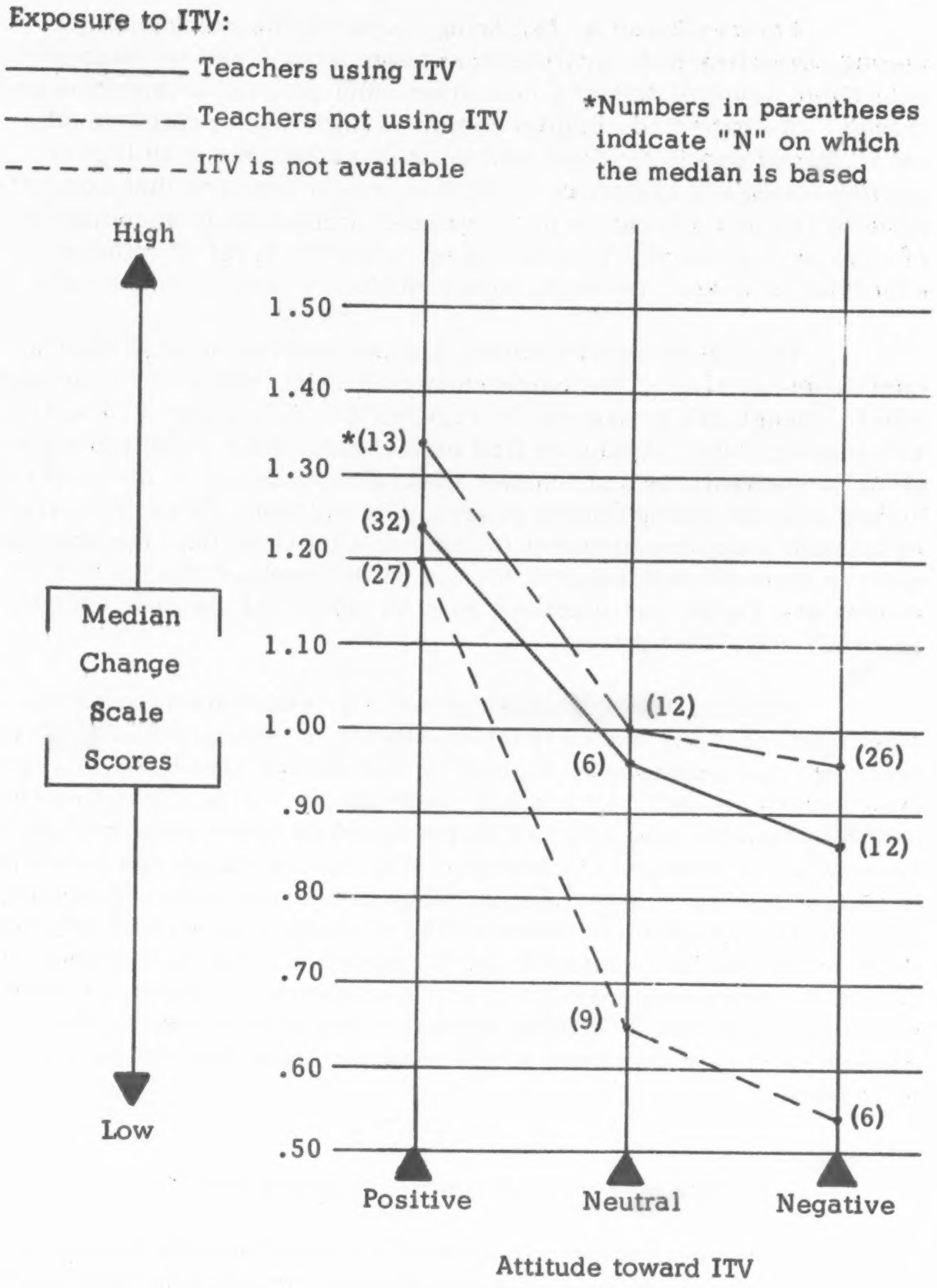

Figure 1.--Median Change Scale Scores and Attitude toward ITV by Exposure to ITV.

Figures 2 and 3, following, present the relationships among commitment to professional associations and to teacher education, level of father's education, and general orientation to change. As expected, higher commitment both to professional associations and to teacher education is associated with higher median Change Scale scores. Of the two, it appears that commitment to teacher education has a greater impact upon acceptance of change in general. In both cases, a higher level of fathers' education is associated with higher median Change Scale scores.

The relationships among the two indices of professional commitment, size of the community of origin, and general orientation to change are presented in Figures 4 and 5, pages 115 and 116 respectively. Again we find high commitment to both professional organizations and teacher education to be associated with higher median Change Scale scores. In addition, there is a stronger relationship for commitment to teacher education than for commitment to professional associations, and the median Change Scale scores are higher for teachers with an urban rather than a rural, or small city, background.

Finally, the relationships among commitment to professional associations and to teacher education, the length of time in teaching, and general orientation to change are presented in Figures 6 and 7, pages 117 and 118 respectively. It is clear that the length of time in teaching has a very marked effect upon the acceptance of change. As we expected, having taught fewer years is associated with higher median Change Scale scores. However, there is an important reversal of the preceding pattern of relationships -- as can be deduced from the opposite slope of the lines in Figure 6. High commitment to professional associations is here associated with lower median Change Scale scores than is low commitment -- regardless of the length of time that the teacher has taught.

Summary: Findings and Conclusions

The most striking feature of the relationships among the Change Scale and the extra-organizational variables is their much greater overall consistency relative to the relationships among attitudes toward ITV and the same extra-organizational factors. We are in no position to know to what extent this relationship may be a consequence of differences between the two measures. Cer-

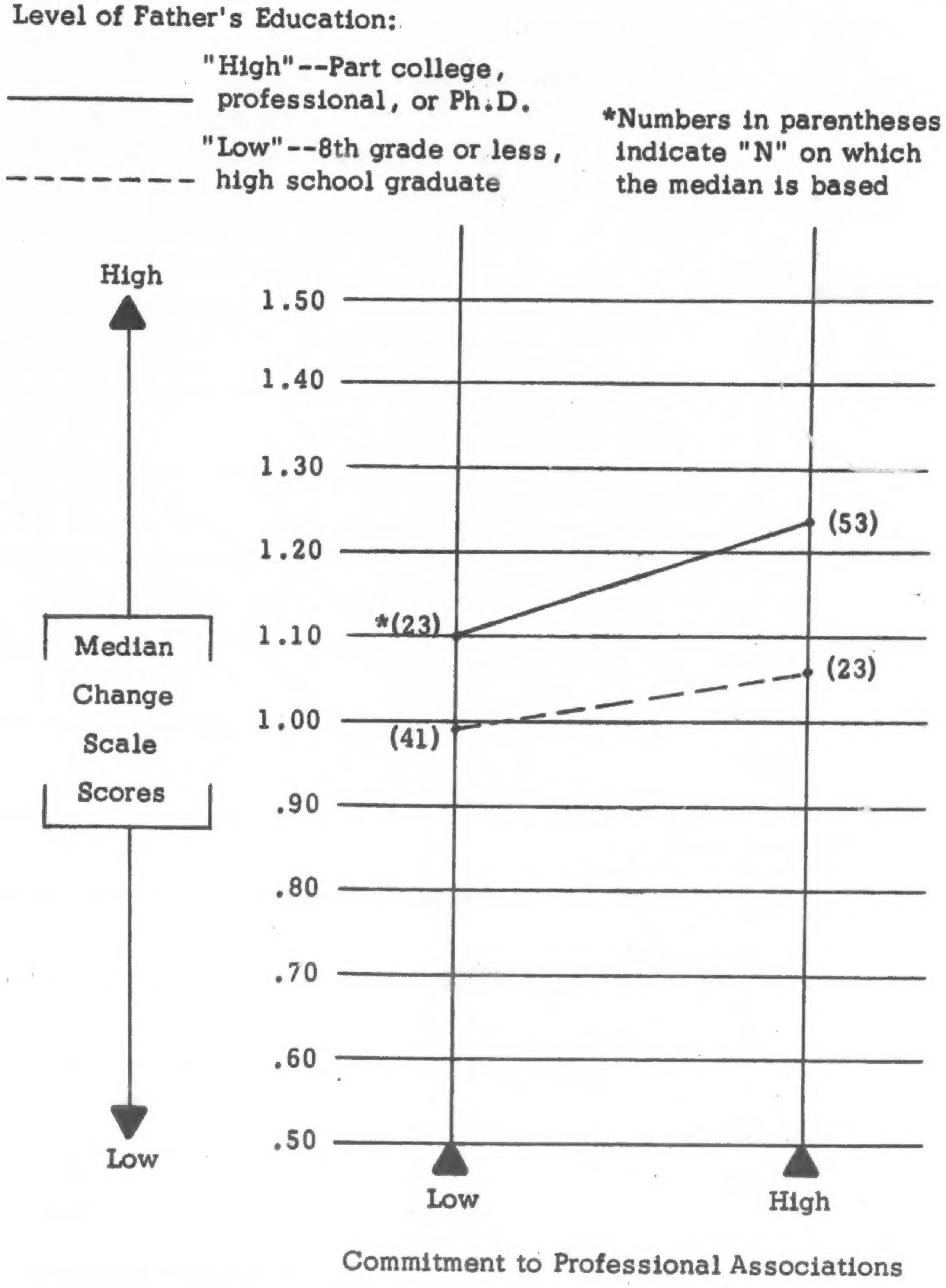

Figure 2.--Median Change Scale Scores by Commitment to Professional Associations and Level of Father's Education.

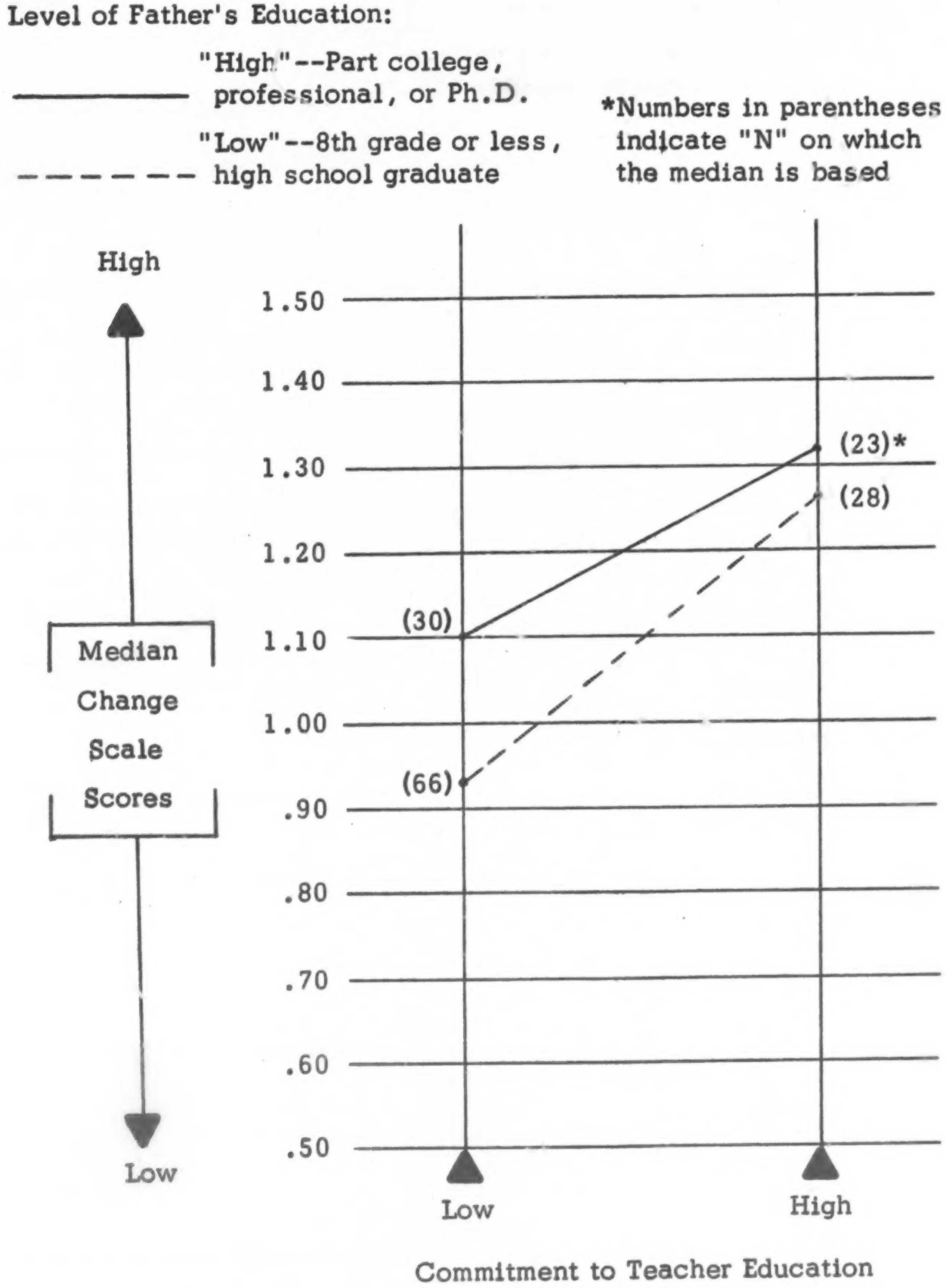

Figure 5.--Median Change Scale Scores by Commitment to Teacher Education and Level of Father's Education.

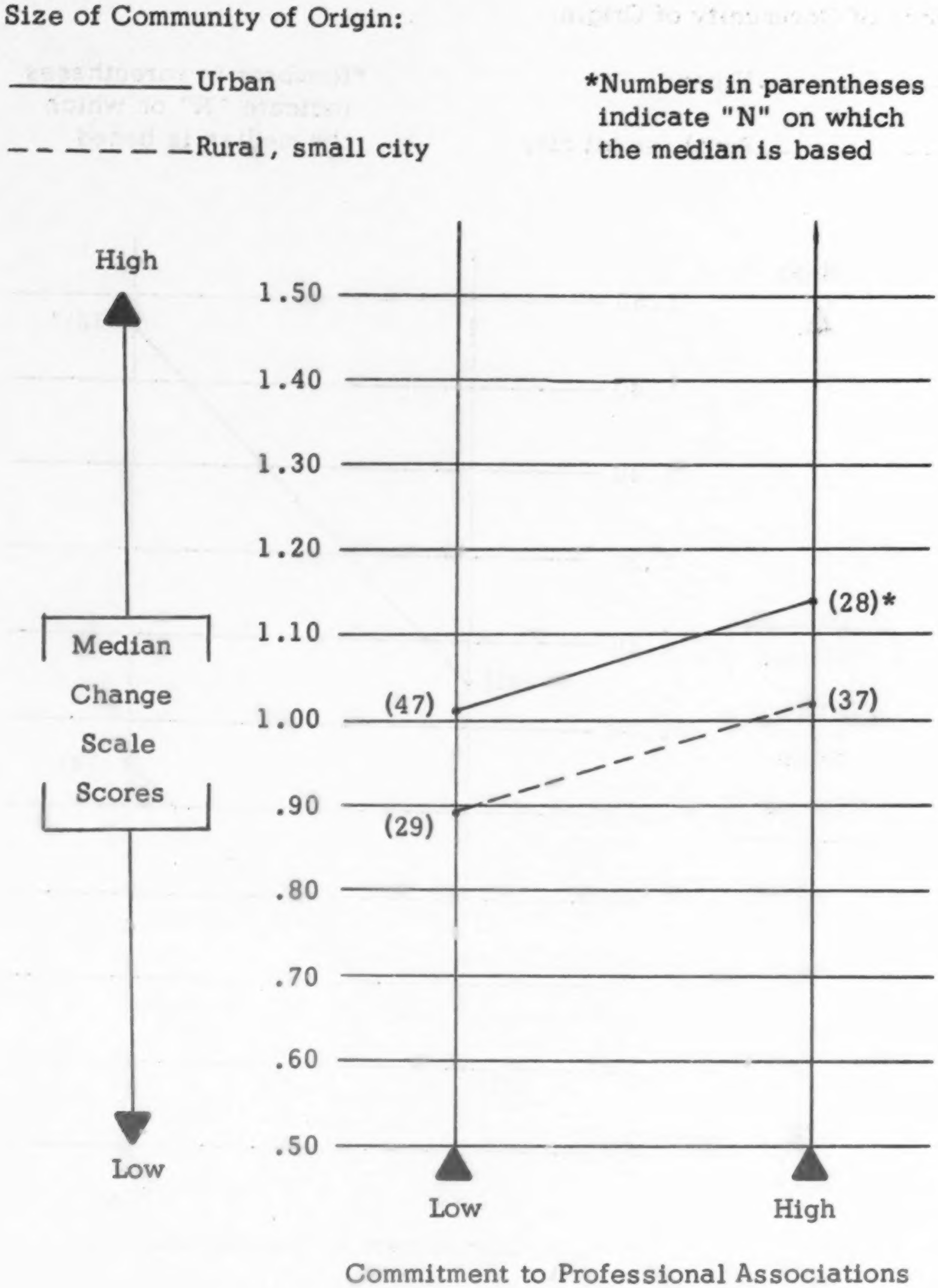

Figure 4.--Median Change Scale Scores by Commitment to Professional Associations and Size of Community of Origin.

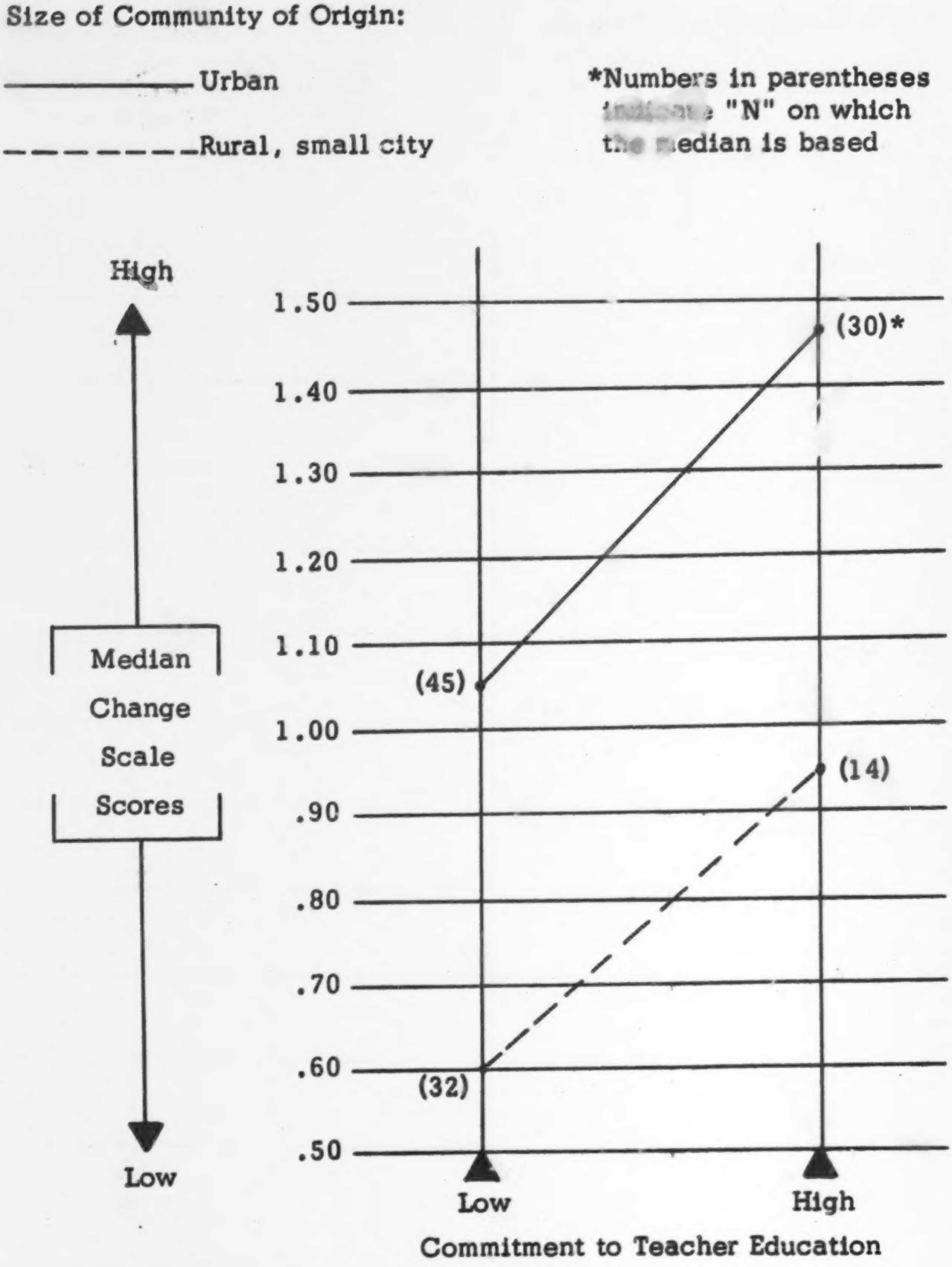

Figure 5.--Median Change Scale Scores by Commitment to Teacher Education and Size of Community of Origin.

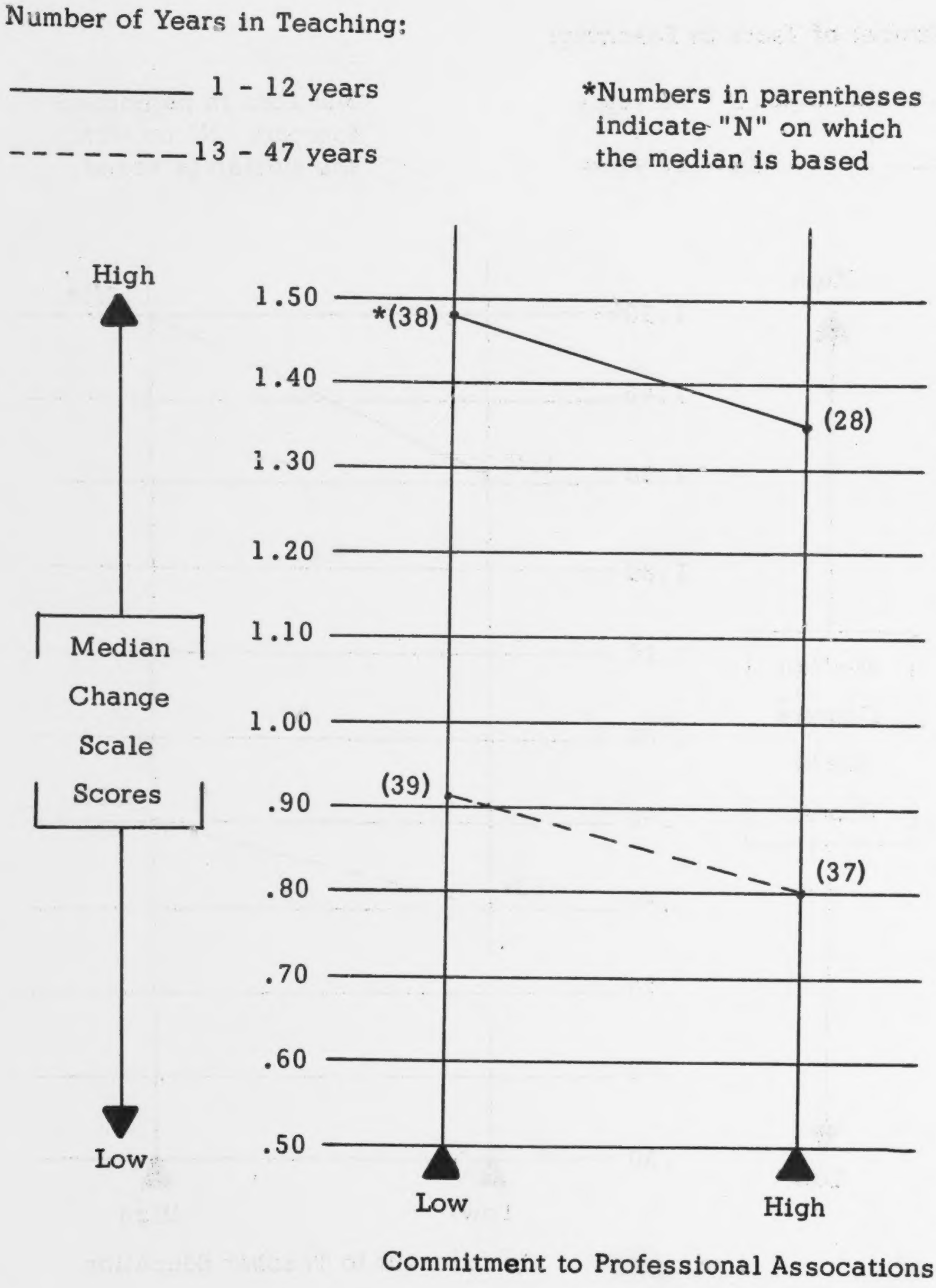

Figure 6.--Median Change Scale Scores by Commitment to Professional Associations and Number of Years in Teaching.

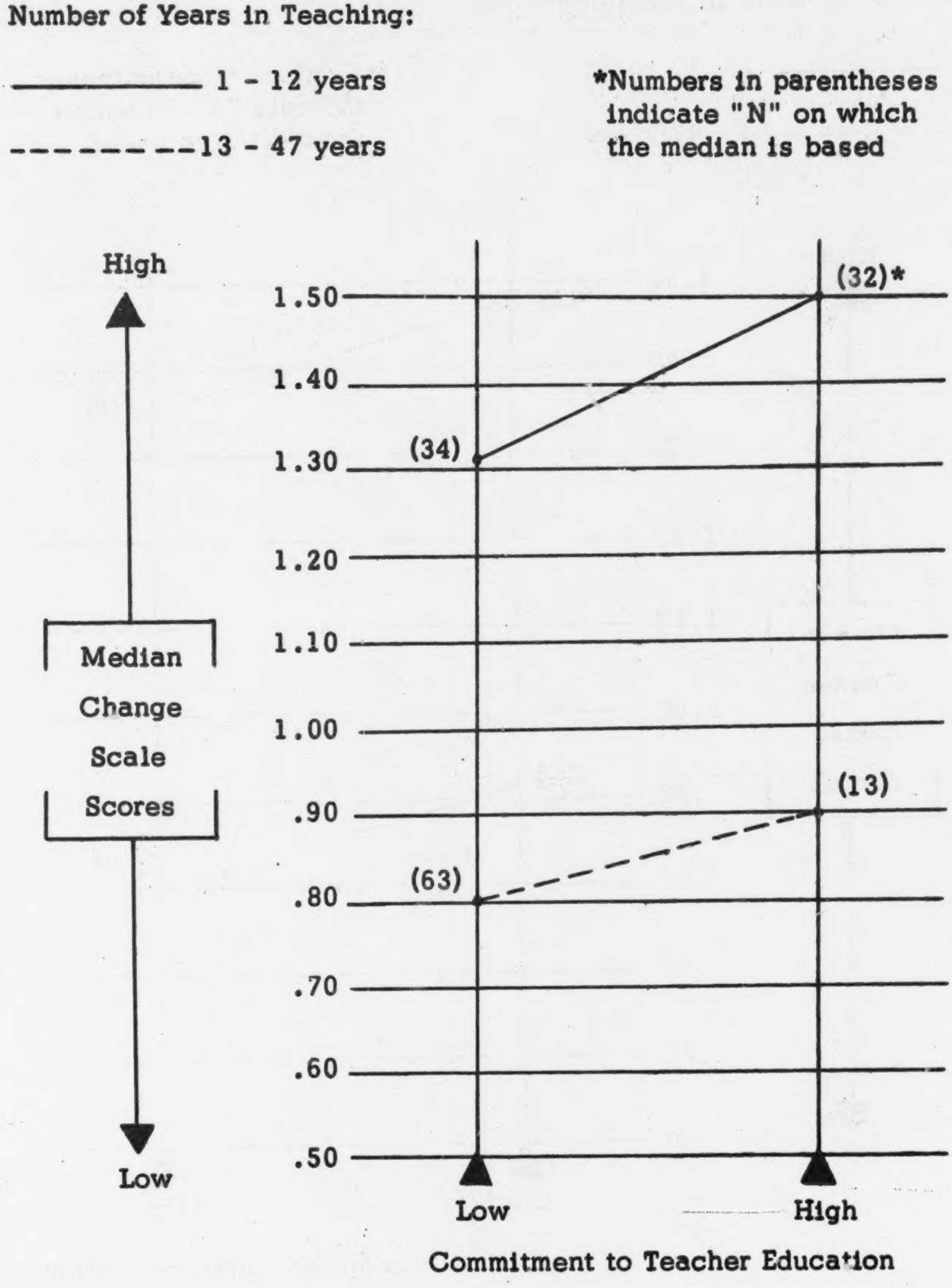

Figure 7.--Median Change Scale Scores by Commitment to Teacher Education and Number of Years in Teaching.

tainly the Change Scale allows for greater discriminations in orientation toward general change than does our measure of attitude toward ITV. On the other hand, the relationship between attitudes toward ITV and the Change Scale was in the predicted direction for the using, non-using and the non-available categories of teachers. This finding would appear to be fairly good evidence that both measures are reasonably valid, although it does not establish whether one is better than the other.

Two other previously mentioned possibilities may have some bearing upon why there is a closer relationship between the extra-organizational variables and the Change Scale than between the extra-organizational variables and either attitude toward ITV or the use-attitude relationship. First, attitude toward ITV was related to those extra-organizational factors associated with a general orientation toward change and not directly with a general orientation toward change itself. Second, specific attributes of ITV may have caused some distortion of the relationship between ITV and the extra-organizational variables On the surface, the last possibility may seem to be less likely in view of the strong relationship between attitudes toward ITV and the Change Scale, and the lack of any such relationship between the specific attributes of ITV (here measured by use, non-use, and non-availability) and the Change Scale. If use and non-use, as unique attributes associated with ITV, distorted the relationship between attitude toward ITV and the extra-organizational factors, why would they not also distort the relationship between attitude toward ITV and the Change Scale?

One answer may be that the general orientation toward change is associated with a number of extra-organizational factors, each of which makes a partial contribution to general orientation and hence to the Change Scale scores. When the extra-organizational variables are taken separately, they may not be associated strongly enough with the general orientation to withstand the distortion stemming from the specific attributes of ITV. But when the Change Scale is used to measure general orientation toward change, the individual contributions made by each of the extra-organizational factors are, in effect, added together to yield a single measure of their collective contribution to general orientation to change. Hence the Change Scale is a "better" measure of general orientation toward change than any of the individual extra-organizational variables taken separately, and it is better able to withstand the distorting effects of the specific attributes of ITV upon attitudes toward ITV.

If this is true, then we may draw from it certain implications with respect to the acceptance of change. It appears that the more favorable the attitude toward change in general, the greater the likelihood that a specific change will be also accepted. Furthermore, those individuals who are most likely to accept a change have certain definite extra-organizational characteristics. They tend to have been teaching a relatively shorter time than the less accepting teachers, to come from an urban background, and to come from a higher socio-economic level. They also tend to be more highly committed to participation in their professional associations[1] and to continuing their professional education. However, this is not the whole story, for overlaying the general orientation toward change are the specific attributes associated with any particular change and with the conditions surrounding its use -- factors which may make a teacher who is ordinarily favorable to change in general less accepting of any given change. In short, although it may be possible to predict that, in general, teachers with such-and-such characteristics will tend to accept changes, we must be prepared for the possibility that the conditions associated with the introduction and the use of a change, and the characteristics of the change itself, will affect the compatibility and incompatibility of the change and hence the actual level of acceptance -- as we have attempted to show in the present chapter and in the two chapters preceding it.

Let us turn now to the major anomaly in our findings on the relationships between the Change Scale and the extra-organizational factors -- the decrease in general readiness to accept changes among those teachers highly committed to professional associations -- when controlling for length of time in teaching. This finding points to a possible weakness in our measure of commitment to the professional association and in our understanding of the role of such commitment in the acceptance of change.

The measure in question is an overall measure of commitment -- a measure which does not differentiate among teachers who are possible committed to *different* sectors of the professional association. Since we did not attempt to measure commitment to these sectors separately, we have no way of knowing whether the teachers who are indexed as being highly committed to the professional association are committed to the *same* sectors of the association and to the same set of norms and values, or whether, as seems possible, they may be committed to very *different* sectors. At any rate, when the effects of length of time in teaching are controlled, higher commitment to professional associations, as measured by our general index, is associated with a tendency to be less favorable toward changes in general. Future research might profitably consider why teachers who are committed to an organization which formally expresses support for the adoption and acceptance of legitimate changes in teaching expertise should be less favorable toward changes in general. It may well be that the teachers who appear to be committed by our index are, in fact, committed to informal friendship networks within the professional associations and not to the formal structure and explicit norms of the professional associations themselves.

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[1] This generalization, on the relationship between general orientation toward change and commitment to professional associations, must be qualified later in keeping with the results of Figure 6.

Another possible reason for this anamalous finding may lie in the suggestion, made earlier, that commitment to groups may affect behavior by means of mechanisms which are more complicated than just the simple adherence to norms governing role behavior within the group. For example, a group may provide experiences or skills which increase one's ability to cope with changes -- and these aspects may not have been tapped by our index of commitment to professional associations. On the other hand, special skills, abilities, or experiences may have been more directly assessed by the measure of commitment to professional education, which can reasonably be thought to be associated with greater skill, and by the other indices of extra-organizational variables which seem to get at a somewhat wider set of experiences than does commitment to professional associations.

Finally, it might be noted that, as we observed in Chapter I, the structure of an occupation may be differentiated in ways which are highly relevant to the acceptance of changes, but the differentiation which is most relevant to changes may not be obvious. If acceptance of a change is, in part, a function of patterns of commitment to various sectors of the structure of an occupation which differ in their change-relevant norms, then care must be taken to insure that the structures which *are* relevant to the acceptance or rejection of changes in expertise are differentiated. This we quite literally failed to do with our "blanket" measure of commitment to professional associations.

CHAPTER VI

SUMMARY AND CONCLUSIONS

The major focus of the research reported herein was on the individual teacher within the social system of the public school. Our goal was to discover how teachers perceived specific educational innovations, and their attitudes with respect to the acceptance and utilization of these innovations. The role of the teacher was viewed in terms of the classroom, the organizational, and the professional role sectors, and in terms of the norms governing performance in these role sectors.

The acceptance of new educational devices was regarded as an instance of the acceptance of changes in occupational expertise. Insofar as control over the acceptance of changes in expertise is concerned, the public elementary school teacher appears to play a role not unlike that played by others in bureaucratic settings. Within these organizational settings, the definition of expertise is determined with the organization rather than by the individual professional or practitioner. In this respect, the teacher population is quite different from that of individuals in agriculture and in medicine where the acceptance of changes in expertise is much more an act based upon an individual decision.

In this connection, we observed that the occupational role of the public school teacher is so organized that norms governing changes in the expertise of this occupation are, for the most part, the responsibility of the school administration or "other experts." In other words, the public school teacher does not perceive of herself as someone who should or can make decisions about educational innovations. The general view seems to be that there are others, above and beyond the teacher, who have the expertise and the power to make such changes. The teacher, on the other hand, sees herself as someone who must adapt to these changes in order to carry on the business of teaching in the classroom.

We saw, for example, that greater emphasis is placed upon behavior which contributes to the functioning of the school organization than upon mastery and excellence in professional expertise. There is a greater reliance upon the school administration and upon the perceived wishes and pressures of parents than upon professional peers as evaluators of professional performance. There is an expressed concern with the image of teaching as a "profession" -- but for the prestige that this accords the occupation rather than for what this may contribute in the way of unusual competency or intrinsic educational excellence.

Within the main boundaries of the role and content of the activity prescribed by the administration and the outside experts, teachers are apparently quite content to maintain only a limited control over how to teach in the classroom. In a sense, the public elementary school teacher seems to take the position that her task is to take whatever curriculum, materials, and devices are given to her and somehow integrate them within the day-to-day teaching process.

In accordance with the authority and responsibility which administrators are granted over the content and definition of expertise, teachers tend to see their role as one in which their major responsibility is for the act of teaching. The maintenance of teaching standards is the responsibility of the administration. In addition, the administration is seen as a buffer between the teacher and the public. Yet even within the area of what they see as their major responsibility -- the act of teaching -- only a little more than half of the teachers felt that they alone, or in conjunction with other teachers, should make the decision on how an innovation should be used in the classroom.

Given this sort of occupational orientation on the part of teachers, it is not surprising to find that many teachers see acceptance of a specific change as something contingent chiefly upon the relevant policies of the administration. In particular, for instructional television, we found that in schools where it was unavailable, the teachers were for the most part favorable in their attitudes toward this device. This attitude was interpreted to be a consequence of perceived compatibility between instructional television and the norms within the profession which are generally favorable to new educational developments. In those schools where instructional television was available, utilizing teachers were more favorable than non-users. This attitude was interpreted as being due to the teachers' commitment to the notion that the administration has the license to determine who should use instructional television and who should not. Thus, in schools where there is ITV, the favorable attitude of utilizing teachers results from the perceived compatibility between the use of ITV and the administration's decision that the use of ITV should be part of the teacher's role. Conversely, the unfavorable attitude of non-users is interpreted as resulting from the feeling on the part of teachers that utilization was not in agreement with their role as determined by the administration. Of interest here is the finding that the pattern of relationships was consistent for type of public school (lower or upper elementary), for size (large or small), and for location (urban or rural).

Although, as noted above, administrative and organizational norms had an important determining effect upon the teacher's attitude toward ITV, other factors were involved in the attitudes held by teachers. Generally, these mediating factors were related to the teachers' commitment to certain aspects of the perceived teacher role. This effect was most marked for norms at the level of generality or inclusiveness which was closest to that of the role behavior actually affected by the change. Thus, as exposure to ITV increased from non-availability to non-use to use, the proportion of the total role which was affected by ITV increased accordingly, becoming less inclusive and more specific. As a consequence, the perceived compatibility and incompatibility between the role and ITV became more apparent over time.

It was also observed that acceptance of change in general (as measured by the Change Scale) was influenced by a general readiness to accept "all" changes. In turn, acceptance of change in general was affected by three other factors: (1) commitment to norms generally favorable to the acceptance of change, (2) past experience with the acceptance of changes, and (3) ability to absorb and to integrate change.

In summary we find that, while they may play some part in the teacher's attitude toward change, other variables are actually of secondary importance when compared with the teacher's orientation to her role. It is actually the belief that it is the legitimized role of the administration to make change decisions that is most salient in determining what attitudes teachers will hold. In short, it appears that, if teachers are told to accept a change such as ITV, they will do so because they feel that their role is one which demands compliance with requests from the administration. The level of acceptance will be affected by the number and the nature of ways in which any particular change is either compatible or incompatible with segments of the teaching role to which teachers are differentially committed.

Certain of the areas of compatibility are easily rectified. Some teachers would find ITV more acceptable if there were changes in the level of the program, the content of the program, or in the style of presentation. Other areas of compatibility are less amenable to manipulation, since they are factors over which the administration has little control. For example, and not unlike other studies dealing with innovative behavior, we find that age, years of teaching experience, and background factors contribute to levels of innovation acceptance. In addition, as noted earlier, predisposition to change, past exposure to change, and self-perception of ability to cope with change are other factors which are associated with the change attitudes expressed by teachers.

It would seem that, as long as the profession remains oriented to the notion that the teacher role does not include the ability or the right to take part in the selection and evaluation of innovations, teachers will, in fact, not play a direct role in how innovations are utilized in the educational process.

Based on the continuous growth of our population and the consolidation of schools, there is no reason to believe that the similarity between the elementary teacher and the bureaucratic functionary will disappear. On the contrary, there is little reason to believe that public school teachers will move to a position in which they will become independent and relatively autonomous professionals.

The tragic aspect here should be apparent to all who are concerned with the socialization of youth and the development of curriculum which will maximize educational excellence. It is a fact that the teacher in the classroom has the opportunity to utilize, to explore, and to evaluate the many innovations which are now being introduced into our schools. Too frequently, however, the failure of a "pre-tested" curriculum is traceable to an administrative decision on how this innovation should be used. As a result the funds, the planning, and the experimental efforts which have gone into the development of an innovation are wasted.

APPENDICES

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APPENDIX A

METHODS OF THE INVESTIGATION AND CHARACTERISTICS OF THE TEACHERS

Introduction

In this appendix, we shall first describe the methods of investigation used in the project. We shall then describe the characteristics of the teachers in terms of variables traditionally employed.[1]

Methods of Investigation

Choice of Schools

In this study, proof depends upon the consistency of relationships holding under different control conditions, rather than upon assertions based on random sampling of a population and the associated statistical tests of significance. Nevertheless, the schools involved in the study were chosen because they represent different types of schools held to exist in the larger population of elementary schools. Thus, of the total number of eight schools involved in the study, two were located in a large city of 1, 600, 000, and two were in lower middle class suburbs of this metropolis. One school was located in a small town, and two were located in a city of 100,000 population. The eighth school was located in a satellite town of the latter city.

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[1] Most of the specific techniques used in the data analysis were described in relevant sections throughout the total report. For those techniques of a more complicated nature, descriptions are provided in the appendices.

Methods of Inquiry

Participant Observers -- In the summer of 1962, four women were selected for training as participant observers. Three of the four observers were college graduates. The four had some college experience. In the fall of the same year, each of the participant observers was assigned to two schools to observe and to record the entire range of activities occurring in these schools. The pattern of observation called for spending alternate time periods in the two schools -- usually alternate weeks. The identities of the observers were known to faculty members. In addition to their observations both within and outside the classrooms, the observers were involved in helping with the clerical work of the schools and in substitute teaching.

Each day's observations were recorded on tape. These tapes were then mailed to the project office, where they were transcribed. The transcriptions were then read and coded under three major headings: (1) faculty role enactments and relationships, (2) community-school relationships, and (3) degree and variety of use of illustrative devices in the classroom. These materials were later used as a partial basis for constructing questionnaires and interview schedules, and added supporting evidence for the conclusions of the study.

The Interviews -- During the school year 1962-63, interviews were held with all of the faculty members of the eight schools. The questions asked during these interviews were largely open-ended, designed to tap the degree of awareness of teachers about changes in the field of education, the degree of awareness of technological devices, the awareness of methods used to introduce these devices, and attitudes toward the devices. In addition, interviews elicited information on problem areas perceived by teachers -- both within the specific school, and in the general area of elementary school education.

The Questionnaires -- In the early spring of 1963, questionnaires were sent to all of the 158 teachers involved in the study. One-hundred and fifty of them were returned. The questionnaires included items eliciting information on the background characteristics of the teachers, their value orientations, school organizational involvement, professional involvement, and sources of information about methods of teaching. Also included were items about teachers' reference groups, teachers' degree of job satisfaction, and their orientations toward the school administration. Finally, two types of scales were included in the questionnaire, designed (1) to measure change proclivities of the teachers, and (2) to measure variations in importance placed by the teachers upon different dimensions of role enactment within the classroom.

The Background Characteristics of the Teachers

The total of 158 teachers included in the study represents levels of teaching from kindergarten through the sixth-grade in all of the sample schools.[1] In addition, teachers from grade levels seven through nine of the two schools located the large city were included in this analysis. Finally, the "special teachers" on the permanent staffs of the schools were also involved in the study.

The background characteristics of these teachers (1) give the reader a better understanding of the teacher population as well as showing their similarity to teachers in other public school systems, and (2) lay the groundwork for subsequent data analysis and interpretation. Where appropriate, the teacher's background characteristics are shown by school in order to indicate the degree to which faculty similarities or dissimilarities exist among the sample schools.

Time of Decision to Enter Elementary School Teaching

The time of decision to enter teaching was made relatively early by the teachers in our study. In all schools, almost half of the responding teachers made such a decision sometime before

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[1] In future analyses, this number will often be less because of the variations in the responses, both among the three principal methods of data gathering, and within each of these methods.

TABLE I

Time of Decision to Enter Teaching by Location of School

Location of School	Time of Decision to Enter Teaching									
	Before High School		During High School		During College		After Work Experience or "Other"		Total	
	N	%	N	%	N	%	N	%	N	%
City:										
1	4	20	7	35	7	35	2	10	20	100
2	4	29	3	21	4	29	3	21	14	100
Small town:										
3	3	21	8	57	2	14	1	7	14	100
Satellite town:										
4	4	36	4	36	2	18	1	9	11	99
Suburb:										
5	--	--	5	50	5	50	--	--	10	100
6	4	22	8	44	4	22	2	11	18	99
Metropolis:										
7	13	42	2	7	14	44	2	7	31	100
8	10	35	11	38	16	21	2	6	39	100

graduation from high school.[1] The time periods and the frequency distribution of responses are shown in Table I, on the previous page. The "other" designation in the last category represents responses pertaining to a decision to teach after family responsibilities were lessened, or when family responsibilities required a fairly stable income -- which teaching appeared to offer.

Reasons for Selecting Teaching as a Career

Respondents noted a variety of reasons for choosing elementary school teaching as a career. Data were gathered from interviews. Frequently, two or more reasons were given for making elementary school teaching an occupational choise. Responses were grouped into five primary categories, as shown in Table II, on the following page. Since school location was unrelated to career choice, the data are presented by teachers alone.

Of the 221 responses giving reasons for choosing elementary school teaching, a fairly even split in frequency occurred between "intrinsic aspects" and "early role model." These two responses were most often rated by respondents. "Intrinsic aspects" refers to responses such as, "because I love children" and "mostly because I thought it a terrific challenge." In general, these comments express satisfaction stemming from the act of teaching.

The category "early role model" includes responses which indicate that contact with someone in the teaching profession was a factor influencing the decision to enter teaching. Typical responses in this category included, "other teachers were in my family and I was influenced by them," and "in sixth grade, I had an idol of a teacher. . . ."

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[1] Unless otherwise noted, the individual schools shall be identified by number. Schools 1 and 2 are located in the city of 100, 000 population. School 3 is located in a small town. School 4 is located in a satellite town of the aforementioned city. Schools 5 and 6 are located in the lower middle class suburbs of the large metropolitan area. Schools 7 and 8 are in the metropolitan area of the city having 1, 600, 000 population.

TABLE II

Reasons for Choice of Elementary School Teaching as an Occupation by Frequency of Response of 154 Teachers

Reason	Teacher Response	
	Per Cent	Number
Intrinsic aspects	30	67
Early role model	30	66
Drift	17	37
Comparative evaluation	13	28
Extrinsic rewards	10	22
Other	4	1
Total	100	221

The next most frequently mentioned reason for going into teaching was "drift." These responses were made largely by teachers who had decided to enter the elementary school teaching profession at a later stage of life. Typical responses included, "there wasn't much else for a girl to do when I left school," "didn't know what I wanted; I was talked into it," and "sort of pushed into it."

The category "comparative evaluation" includes statements indicating that the respondent decided upon elementary school teaching on the basis of comparisons with other occupations or with other levels of teaching. Statements in the category "attraction to extrinsic rewards" pertain to job attributes other than teaching itself. This category includes responses such as "an 'insurance policy'," "the salary," etc. The two categories above contained the fewest number of responses, 13 per cent and 10 per cent respectively.

While comments related to "extrinsic rewards" were relatively few with respect to reasons for going into teaching -- 10 per cent of the responses -- this type of explanation was more likely to be given as a reason for remaining in elementary school teaching. Table III shows that this category, which included "money," "security," "boredom at home," "close to retirement," etc., accounted for 35 per cent of the responses.

TABLE III

Reasons for Remaining in Elementary School Teaching by Frequency of Response of 154 Teachers

Reason	Teacher Response	
	Per Cent	Number
Intrinsic-altruistic	59	129
Extrinsic reward	35	78
Terminal -- may leave profession	4	8
Other	2	5
Total	100	220

In answering the question "What are your principal reasons for remaining in teaching today?" most teachers replied in terms of the intrinsic aspects of the job. These responses ranged from the self-satisfying aspect of the job, "I enjoy working with kids," to altruistic motives: "It's socially useful," ". . . for the guidance I can give to kids that need help," etc. A few responses indicated a dissatisfaction with teaching and the possibility of leaving the profession at some future time.

Overall, based on the number of responses (all 154 of the responding teachers gave at least one response), a large factor in the decision to enter elementary school teaching and to remain in the profession were the intrinsic rewards -- enjoying and liking teaching. Early role models were equally influential in the decision process. However, extrinsic rewards accounted for over a third of the responses explaining why the teachers remained in the profession.

Age of the Teachers

The range of ages for the teachers included in the study was from 22 to 70. The highest median ages of the teachers were in Schools 3, 6, and 8. The age-school distribution is shown in Table IV, on the following page. From this table, it can be seen that, in comparing medians, age is not necessarily directly associated with number of years in the profession. A discrepancy between these two variables is most apparent in comparing School 6 with School 1. In the latter school, the median age was 35.5 and the median number of years in the profession was 11.5. In School 6, however, the median age was 44.5, and the median number of years teaching elementary school was only 7. Overall, however, disregarding the variations among the schools, length of time teaching was associated with age.

Community of Origin

For the total sample, the greater number of teachers came either from farms and small towns or from metropolitan areas with populations over 250,000. However, as Table V, on page 140, illustrates, differences in characteristics of the communities of origin existed among the schools. In School 3, 80 per cent of the teachers came from small towns or farms. In School 7, only 6 per cent of the teachers came from similar backgrounds.

Evidence from Table V suggests that respondents were teaching in communities most closely related to their communities of origin. In both Schools 7 and 8 more teachers came from the large "central city" than from any other type of community. None of the teachers in School 3 came from the "city." Only in School 1 did a majority of the teachers come from communities somewhat dissimilar from the community in which they were teaching. Sixty-five per cent of the teachers in this school came from farms or small towns. These respondents were teaching in a community of approximately 100,000 population.

TABLE IV

Age of Teachers and Length of Time in the Teaching Profession, by School for 148 Teachers

Location of School	Age of Teachers		Years in Profession		Usable Number of Cases
	Median	Range	Median	Range	
City:					
1	35.5	24-61	11.5	1-35	20
2	38.0	23-58	5.5	1-34	14
Small town:					
3	50.0	25-58	20.0	2-34	15
Satellite town:					
4	32.0	22-59	3.5	1-24	11
Suburb:					
5	42.0	26-65	13.0	2-27	11
6	44.5	24-68	7.0	2-24	18
Metropolis:					
7	41.0	22-70	11.0	1-47	30
8	53.0	31-61	21.0	7-38	29

TABLE V

Community of Origin of Teachers by Location of Teachers' Present Schools

Type of Community of Origin	Location and Code Number of Present School															
	City				Small Town		Satellite Town		Suburb				Metropolis			
	1		2		3		4		5		6		7		8	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Farm	5	25	3	20	6	40	3	30	1	9	2	11	--	---	4	14
Small town, under 25, 000	8	40	4	27	6	40	1	10	3	28	5	28	2	7	7	24
Medium-sized town, 25, 000-99, 000	1	5	1	7	1	7	2	20	2	18	--	---	2	7	--	---
Small city, 100, 000-250, 000	3	15	1	7	--	---	--	---	1	9	3	17	3	10	--	---
Suburb of a metropolitan area of 250, 000-500, 000	1	5	--	---	1	6	1	10	2	18	1	5	--	---	--	---
Suburb of a large metropolitan area of 500, 000-2, 000, 000	--	---	--	---	1	7	1	10	1	9	2	11	4	13	2	7
Central city of 250, 000-500, 000	1	5	4	27	--	---	2	20	--	---	2	11	2	7	2	7
Central city of more than 2, 000, 000	1	5	2	12	--	---	--	---	1	9	3	17	17	56	14	48
Total	20	100	15	100	15	100	10	100	11	100	18	100	30	100	29	100

TABLE VI

Level of Education of Teachers' Fathers
by Location of Teachers' Present Schools

Father's Level of Education	Location and Code Number of Present School															
	City				Small Town		Satellite Town		Suburb				Metropolis			
	1		2		3		4		5		6		7		8	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
8th grade or less	4	20	2	13	4	26	1	12	2	18	5	28	9	29	7	25
Part high school	4	20	5	33	4	27	3	39	4	37	2	11	4	12	7	25
High school graduate	5	25	1	7	3	20	1	12	2	18	5	28	9	29	5	18
Part college	2	10	1	7	1	7	1	12	2	18	2	11	3	10	4	14
A. B. degree	2	10	2	13	2	13	2	25	--	---	1	5	3	10	2	7
M. A. degree	3	15	3	20	1	7	--	---	--	---	3	17	3	10	3	11
Ph. D. degree	--	---	1	7	--	---	--	---	1	9	--	---	--	---	--	---
Total	20	100	15	100	15	100	8	100	11	100	18	100	31	100	28	100

Education

Various studies have noted that school teachers come predominantly from what has been traditionally termed "middle" and "upper middle" class backgrounds. More recently, it has been noted that the social class origins of teachers have become somewhat more diversified, particularly in urban areas. Recent studies have also shown that larger numbers of teachers are being recruited from the lower classes. For some observers, the teaching profession has been viewed as a means for upward occupational mobility. The respondents in our study conform to these more recent observations. Using educational level as one index of class occupancy, we find that the teachers in our study tend to surpass their fathers in educational accomplishments. Whereas 45 per cent of the fathers of the teachers had less than a complete high school education, all of the teachers had gone beyond high school, and only 2 per cent had less than four years of college or its equivalent. Table VI, on the previous page, shows the levels of education attained by the fathers. While the median education level of teachers' fathers tended to be the same for all schools -- high school graduates or at least some high school education -- the largest percentages of fathers holding the M. A. degree were in the four urban schools and in one of the four suburban schools.

Career Patterns

The career patterns of the teachers are indexed by age, length of time in the profession, and marital status. In all of the schools except Schools 7 and 8, the majority of teachers had taught in other school systems before coming to the school in which they were located at the time of this study. With the exception of Schools 2 and 8, the teachers who had spent their entire careers in the schools under study had a lower median age than those who had also taught in other school systems. In addition, those teachers (with the exception of Schools 7 and 8) who had been in the profession longest were most likely to have taught in other school systems. Table VII, on the following page, shows the relationship between job mobility, age, and length of time in the teaching profession.

In most cases, teachers whose teaching careers had been interrupted tended to be older than those whose careers had been continuous. Further, among unmarried teachers, a larger num-

TABLE VII

Occupational Background of Teachers by Location of Present School System

Location of Present School	Some School System Only					Different School System(s)				
	N	Teacher's Age		Years Taught		N	Teacher's Age		Years Taught	
		Median	Range	Median	Range		Median	Range	Median	Range
City:										
1	6	30.5	24-55	6	1-12	14	38.5	27-61	13	5-35
2	3	38.0	38-41	2	1-10	11	35.0	24-58	7	2-34
Small town:										
3	1	25.0	---	3	---	14	50.0	23-58	21	2-34
Satellite town:										
4	1	22.0	---	1	---	10	33.0	25-59	5	2-31
Suburb:										
5	2	34.0	26-42	8	2-14	9	51.0	29-65	14	3-27
6	5	29.0	27-51	4	2-10	13	49.0	24-68	13	3-24
Metropolis:										
7	23	39.0	22-62	12	1-34	7	43.0	23-70	10	1-47
8	23	54.0	31-61	22	7-38	6	42.0	40-58	15	11-32
Total	64	--	---	--	---	84	--	---	--	---

TABLE VIII

Age and Marital Status of Teachers
by Career Pattern

Locations of Present School	Continuous Career					Interrupted Career				
	Median Age	Now Married	Past Marriage	Not Married	N	Median Age	Now Married	Past Marriage	Not Married	N
City:										
1	32.0	5	--	4	9	40.0	6	2	3	11
2	38.0	7	--	2	9	42.0	4	--	1	5
Small town:										
3	30.5	4	--	--	4	50.0	8	2	1	11
Satellite town:										
4	25.0	3	--	--	3	44.5	5	3	--	8
Suburb:										
5	29.0	2	--	1	3	53.5	5	3	--	8
6	32.5	5	--	1	6	48.5	8	4	--	12
Metropolis:										
7	33.0	10	2	7	19	50.0	10	2	--	12
8	53.0	8	--	8	16	54.0	12	--	1	13
Total	----	44	2	23	69	----	58	14	8	80

TABLE IX

Causes of Interruptions in Teaching Career by Location of Teachers' Present Schools

Location of Present School	Reason for Interrupting Teaching Career						Total
	Raise Family	Another Job	Return to College	Family Illness	Other	None Given	
City:							
1	7	1	2	--	--	1	11
2	3	--	1	--	--	1	5
Small town:							
3	7	2	1	--	--	--	10
Satellite town:							
4	3	1	--	--	1	3	8
Suburb:							
5	4	--	1	--	--	3	8
6	9	2	--	1	--	--	12
Metropolis:							
7	7	1	1	--	1	2	12
8	12	--	1	--	--	--	13
Total	52	7	7	1	2	10	79

ber had continuous rather than interrupted careers. As would be expected, the primary cause of interrupted career was the raising of a family. Table VIII, on page 144, shows the differences in age and marital status between teachers having continuous *versus* interrupted career patterns. Table IX, on the previous page, summarizes the causes of the interruptions.

Economic Status

Of the total number of teachers, 17 were men. Of these, 15 were married. For these 15 teachers, 11 indicated they found it necessary to supplement their teaching income by other employment. The two men who were unmarried indicated that they needed no additional income.

Fewer female than male teachers found it necessary to supplement teaching income with other employment. Of the 130 female teachers who responded to this question, only 15 per cent indicated that other employment was necessary. Table X, below, shows the percentages of female teachers by marital status who felt employment in addition to teaching was necessary. As can be seen from Table X, the largest proportion of women teachers who felt other employment was necessary was found among those who were divorced or widowed.

TABLE X

Female Teachers' Perceived Necessity for Other Employment, by Marital Status

Marital Status	Other Employment Perceived as				Total	
	Necessary		Not Necessary			
	N	%	N	%	N	%
Currently married	10	12	75	88	85	100
Past marriage	5	31	11	69	16	100
Unmarried	4	14	25	86	29	100
Total teachers	19	--	111	--	130	100

There is little variation among the schools as to the percentage of teachers finding additional employment necessary. Only in School 3, however, did the faculty unanimously agree that additional employment was unnecessary. Table XI shows, by school, the teachers' perceptions of the necessity of additional employment.

TABLE XI

Teachers' Perceived Necessity for Other Employment, by Location of Present School

Location of Present School	Other Employment				Total	
	Necessary		Not Necessary			
	N	%	N	%	N	%
City:						
1	5	25	15	75	20	100
2	4	29	10	71	14	100
Small town:						
3	--	--	15	100	15	100
Satellite town:						
4	1	11	8	89	9	100
Suburb:						
5	3	27	8	73	11	100
6	5	28	13	72	18	100
Metropolis:						
7	8	26	23	74	31	100
8	4	14	25	86	29	100

The occupations of the spouses of the female teachers cover a wide range of jobs. Table XII, on the following page, shows the occupations of the non-retired spouses of female teachers. The usable "N" in Table XII was 83. Within each of the schools the distribution of occupational categories was fairly similar.

TABLE XII

Occupation of Female Teachers' Non-Retired Spouses

Location of Present School	Occupations of Non-Retired Spouses							Number
	Executive or Administrator	Professional or Specialist	School Teacher or Related	Sales, Clerical	Semi-Skilled	Farm	Student	
City:								
1	1	1	1	2	1	--	3	9
2	2	3	1	1	--	1	4	12
Small town:								
3	2	--	1	3	1	2	2	11
Satellite town:								
4	--	3	1	--	--	--	3	7
Suburb:								
5	2	1	--	--	1	--	--	4
6	1	2	4	2	5	--	--	14
Metropolis:								
7	1	4	3	4	1	--	--	13
8	1	2	4	4	2	--	--	13
Total	10	16	15	16	11	3	12	83

However, the comparatively small number of respondents prohibits drawing conclusions about the differences among the schools which do exist. Among the eight schools, the median incomes of the spouses of female teachers range from $4,999.50 in School 4 to $9,249.38 in School 8. The lowered medians in Schools 1, 2, 3, and 4 reflect the lower incomes of husbands who were students at the nearby state university. The range of incomes of the spouses of female teachers is from less than $2,000 to over $12,000.[1] Table XIII presents the data on spouses' incomes.

TABLE XIII

Median Income of Spouses of Female Teachers by Location of Present School

Location of Present School	Median Income of Spouses
City:	
1	$5,499.00
2	$6,166.00
Small town:	
3	$5,499.00
Satellite town:	
4	$4,999.00
Suburb:	
5	$6,499.00
6	$6,799.00
Metropolis:	
7	$6,499.00
8	$9,249.00

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[1] It may be noted here that no one-to-one relationship exists between spouse's income and teaching perceived as necessary to supplement family income. One respondent, who indicated her husband earned between $10,000 and $12,000, claimed her teaching was needed ". . . to live the way we like to and to provide for the advanced education of our children."

Among the 15 married male teachers, seven indicated independent earnings by their wives. Two of these wives were employed as full-time teachers. The rest had part-time employment as a teacher, a nurse, a graduate assistant, an accounting clerk, and as a sales person.

Religion

The majority of the teachers came from Protestant religious backgrounds. Of the 149 teachers answering the question, 71 per cent indicated that they were raised as Protestants. Comparison of current and early religious identifications indicated little change. Few teachers, regardless of religious origin, have abandoned their early religious identifications. While at least one Catholic is represented in each of the schools, only in Schools 7 and 8 is there a greater diversity of religious preference. This diversity is represented by the presence of teachers of the Jewish faith. Table XIV, on the following page, presents the data on differences in religious backgrounds; while Table XV, on page 152, summarizes the current religious preferences of the teachers.

Summary

On comparing teachers in this study with those in other studies, it would seem that no great differences exist. As in other studies, it appears that the background characteristics of the teachers are determined largely by the sizes and types of communities in which the schools are located. One important differentiating factor, however, should be mentioned. This factor is the presence of a large state university near to four of the eight sample schools. The result is that, for this particular group of teachers, the proportion married to university students may be somewhat unique. Analysis of other variables, however, indicates that the university itself had little effect in structuring teachers' orientations toward their occupational roles.

TABLE XIV

Past Religious Affiliation of Teachers, by Location of Present School

Location of Present School	Teachers' Past Religious Affiliation								Total	
	Protestant		Catholic		Jewish		Other			
	N	%	N	%	N	%	N	%	N	%
City:										
1	18	90	2	10	--	--	--	--	20	100
2	15	100	--	--	--	--	--	--	15	100
Small town:										
3	14	93	--	--	--	--	1	7	15	100
Satellite town:										
4	9	90	1	10	--	--	--	--	10	100
Suburb:										
5	7	64	3	27	1	9	--	--	11	100
6	17	94	1	6	--	--	--	--	18	100
Metropolis:										
7	13	42	11	35	6	20	1	3	31	100
8	14	49	10	34	5	17	--	--	29	100

TABLE XV

Current Religious Preference of Teachers, by Location of Present School

Location of Present School	Teachers' Current Religious Preference										Total	
	Protestant		Catholic		Jewish		Other		None			
	N	%	N	%	N	%	N	%	N	%	N	%
City:												
1	17	85	3	15	--	--	--	--	--	--	20	100
2	13	93	1	7	--	--	--	--	--	--	14	100
Small town:												
3	13	86	1	7	--	--	1	7	--	--	15	100
Satellite town:												
4	9	90	1	10	--	--	--	--	--	--	10	100
Suburb:												
5	6	60	3	30	--	--	--	--	1	10	10	100
6	16	89	2	11	--	--	--	--	--	--	18	100
Metropolis:												
7	10	33	12	40	5	17	1	3	2	7	30	100
8	14	48	10	35	5	17	--	--	--	--	29	100

APPENDIX B

AN OVERVIEW OF THE COMMUNITIES

Introduction: The Five Communities

The five communities in which the schools of the study were located ranged from a large metropolitan center to a small-town county seat. Each region provided a structural context, the general knowledge of which introduced variables relevant to the central focus of the study -- technological innovation in public education.

This appendix provides a brief demographic description of each community, followed by an enumeration of the relationships between school and community. Because of the limited scope of this report, analysis of school-community relationships encompass but a small fraction of the overall perspective of the study. Instead, the analyses will stress more heavily those relationships which proved relevant to the main themes of the study.

Town C is a small suburban community. Many of the residents are employed in the nearby city. Among its teachers, the school district, while not affluent, has established a reputation of willingness to support its schools. This was true especially in the realm of school finance. The school system had been engaged in an experimental instructional television study before and during this research.

Nearby B is a small-town county seat. The community is characterized by an older adult population, and by more traditional social patterns than is the case in the neighboring suburban area C. The school system did not have a previous history of interest in innovation, and the tax records reveal that the school enjoyed less per-dollar valuation than did any of the other four districts studied.

Town A is a city of approximately 100,000 people in which the two schools studied were located. Valuations based on taxable property were higher in A than in either C or B. As a consequence, the community was able to provide the services of special teachers as well as an experimental program in instructional television. The size of the system necessitated a rather complex organization which coordinated the activities of several schools distributed throughout the city.

Town E is the center of a large industrial area. Two schools were studied in this city-county district. The school system had, at the time of our study, developed as a complex hierarchy which was composed, in rough skeleton, of: a superintendent, several assistant superintendents, district supervisors, principals, and special and classroom teachers. The assessed valuation of taxable property was high. Numerous special services, including such examples as counseling, helping teachers, and an established instructional television series, were available. But a millage issue failed in the middle of the academic year. Consequently, teachers viewed future prospects as somewhat nebulous. Further, during the year of our study, students were being transported from culturally disadvantaged areas in the central city to outlying schools.

Town D is located on the urban fringe. It is a newly-evolving suburban district. The two schools studied were, at the time of the study, engaged in organizing and developing a school system which was rapidly increasing in size and complexity. Instructional television was not among the teaching methods employed. However, the possibility of experimenting with that innovation had been under consideration for some time.

School and Community C

The Demography of Community C

Town C is located on flat, almost drab terrain. It has spread along the access route to a metropolitan center. Preceding the automobile, C served as the home of many who were employed in the near-by city, and was linked to the central city by an electric railway, the Inter-Urban, which served the needs of commuters until the advent of automotive transportation.[4*]

The community now has four thousand inhabitants, and it is unincorporated. There is a lack of centralized authority in the community's surrounding area which depends on the host city. In the pattern of developing urban fringe towns, it is a relatively uncoordinated accumulation of special services, residential units, and unused land. The conglomerate gives the impression of an unplanned mosaic -- a restaurant, a motel, a vacant lot, a used-car lot, a housing development, a series of older homes, and a trailer park. Few frontages are curbed, and the observer is met by shoulders, often rutted and gravelly, leading to the local places of business. The homes suggest that the dwellers are in lower-status social categories than certain of the more affluent residential suburbs of the central city. Further, the vacant shops and the general condition of the business enterprises attest to a precariously high business mortality rate. The structures are relatively new, and there is a minimum of local social organizations, service clubs, governmental units, and zoning, and paved streets.

The population of the area served by the school district is comparatively youthful, numbering approximately eight thousand in all.[14] C shares with D the highest percentage of population under eighteen (42%). Further, the percentage of population over sixty-five contrasts markedly with that of E and A, being only about one-half as large (5%).[15] The area is ethnically homogeneous, as a survey of non-white inhabitants attests. The 1960 U. S. Census indicates a non-white population of less than one-tenth of one per cent. Further, the only churches existing in the area are Protestant, Baptist, Presbyterian, Methodist, and Nazarene. Of occupations represented, the most recent census showed the largest concentration among craftsmen, foremen, and kindred workers, with the second largest representation being derived from operatives, or blue-collar workers.[15]

Next to E, C has the lowest median income per family ($6, 191.00).[15] C's families ranked by far the lowest of the five communities studied in reporting incomes of over ten thousand dollars (12%) -- with A falling next on the scale, reporting 17 per cent in this bracket.[15] However, C boasts relatively few unemployed (4.6% in 1960) as well as a median of twelve school years completed by those of twenty-five years or older.[15] This median educational level is higher than that of any of the four remaining communities surveyed.

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*Please note that this index number, and others which follow, refer to the numbered items listed in the bibliography at the end of this appendix.

Because no central governmental unit exists, there are no official figures on population shifts. However, there are numerous indications of a relatively high growth rate within recent years. An official of C's post office reported that the bulk of mail handled doubled during the period 1954-1962.[16] Though the picture is somewhat complicated by school mergers and transfers as well as by political annexations, the general trend was one of rapid growth for the area served by the present school district. During the decade previous to the study, a new high school was constructed. A township fire department was expanded and improved through the construction of a new fire station, a $1,500,000 sewer system was constructed, street lighting was installed, and an economic development committee was formed. Plans are now being made for a community water system and health facilities. Still, excluding school units, the only library available to area residents is a small branch of the county library in the township hall.

School-Community Relationships

Most communities may be distinguished by the unique characteristics of their institutiions. The uniqueness provides an orientation -- an identity. For C, the school system was a focal institution, functioning to provide a major portion of that identity. One school employee poignantly summarized this condition in observing, "The school is our biggest business." Events surrounding a recent school merger are illustrative of the crucial role played in community life by the educational system. School officials and community leaders from both towns reported general agreement that consolidation would provide higher administrative efficiency as well as additional services to students. Since C's system was larger and had distinctly superior physical facilities, the officials decided to retain the administrative offices and the organizational structure of that system. Yet, in spite of manifestly superior educational facilities offered by the proposed merger, it passed by a margin of only two votes in a closely-fought campaign.

Upon being queried as to where he thought the opposition to the merger was centered, a member of C's school administration stated that, ". . . It was from the businessmen [of the community losing the administrative unit]. In C, all we have is our schools. In a merger, we would lose some of [our] identity."

Though the merger promised long-term gains, immediate effects were somewhat less desirable. The merger, together with another recent consolidation, created innumerable administrative headaches. In addition, the low income level and existing pockets of economic depression added to the burdens of the community. Of the five schools surveyed, C received by far the largest financial grant from the State. A total of $22,000.00 for the 1962-1963 academic year was granted as "hardship aid."[7] But this, by no means, met the existing financial demands. The State equalized property values per pupil were the lowest of any of the other five systems under study ($6,251.00).[10] (In this state, school taxes are based upon property, the income tax having been repeatedly rejected by the Legislature.) Another study ranked the C school system 478th among 534 state school districts with reference to taxable property available for education. (See Table X at the end of this appendix.) The $6,251.00 figure may be contrasted with $17,895.00 in State equalized valuation available for each child enrolled in the E school system in 1962-1963.[7] Thus, although the community levied a millage of 18.1 (second highest in the five systems studied), the total amount available per membership child from local school district revenue sources was only $113.14.[8]

The State aid per child, which was second highest of the communities studied, provided an added $193.68. In total, the amount available per membership child in 1962-1963 was only $306.82.[8] The actual cost per child was $303.56[8] (396th in 534 school districts reporting, as shown in Table X),[12] a figure closely approaching the available funds. The reader must, of course, be cautioned that there is no necessary correlation between the amount spent and the quality of educational services rendered. However, when C's available funds of $306.82 per membership child are compared with the $474.27 available for youngsters in the adjacent metropolitan center, a differential with regard to the "return" seems indeed probable.[8]

To the degree that salary and financial reward attract and maintain qualified professionals, the following figures indicate the impact of financial limitations. (See Table VI at the end of this appendix.) The average salary paid a C teacher was $5,486.00 as compared with $7,129.00 paid in near-by A.[7] A separate study, excluding administrative officials, reported an average teacher's salary of $4,629.00 and ranked C 392nd in 534 State schools reporting.[9] (See Table X at the end of this appendix.) The beginning teacher at C accepted a $4,570.00 minimum as opposed to $5,000.00 available for a fledgling educator in A.[7] Further, the maximum which a C teacher possessing the Master's Degree enjoyed was $6,400.00. This figure may be compared with the $8,500.00 received by the experienced teacher of the neighboring city.[7]

The school system employed no full-time psychologist or any health officials. However, three full-time librarians and three guidance counselors were under contract in 1962-1963. Eighteen percent of the teaching staff possessed M.A. degrees. The system also boasted one of the lowest percentages of teachers without academic degrees. Only one such teacher was employed during the year.[7]

The school superintendent had tried to involve the community in school development. A study committee has been formed -- composed of a central coordinating group, a finance committee, a physical facilities committee, a curriculum committee, etc. These committees included members of the school board and they worked closely with that body. It would appear that the administration perceived a need for improved educational facilities. It is also evident that administrative officials and a concerned citizenry were restricted in achieving this end by factors beyond their immediate ability to control -- inadequate tax base, rapidly increasing enrollments, and annexations and mergers and their accompanying reorganizations.

School and Community B

Demography of Community B

> Ah . . . I think the children here are a little lacking in experience background. This minimizes their imaginations. They haven't experienced enough or seen enough to handle new and stimulating ideas -- not enough music -- art lessons -- and their parents' time is spent on T.V. or hunting. (A teacher of the B schools.)

Town B is the county seat. The court house is the focal point of the village square, and is surrounded by the retail outlets -- a restaurant, a theater, and other service establishments. One's first impression is of a quiet, conservative community of aged building and tree-lined streets.

Thirty-nine per cent of the population is under 18. The community also possesses the highest percentage over 65 (10.5%).[15] An experienced demographer[14] acquainted with the region attributes the high percentage in the upper age brackets to a large group of retirees -- composed, in part, of former farmers and laborers of the region. The population of the city itself stood at 4,522 in 1960.[15] However, the school district covered approximately 110 square miles and, as the figures cited below will indicate, drew from a much larger population.[14] While the 1960 census does not report data useful in ascertaining mobility characteristics for towns of B's size, knowledgeable local officials and demographers from the near-by State university agree[14] that a substantial minority of the residents commute to the larger metropolitan center.

According to the 1960 census figures for the five communities, B had the lowest percentage of its workers engaged in the manufacturing trades (26%). This figure may be compared with D's (43%) and C's (33%). B also had the lowest percentage unemployed (2%), the average for the five communities being six per cent.[15] Breakdowns derived from Table V (at the end of this appendix) show that the occupations most frequently reported in 1960 were clerical, 260 (16%); professional, 243 (15%); operatives, 266 (16%); craftsmen and foremen, 202 (12%); and service workers, 182 (11%).[15] These workers were drawn from a total of 1,597 employed inhabitants.[15] The best estimate of the total population served by the school districts was based on a 1963 estimated fall enrollment.[8] It was approximately 10,600. Since the population living within the city limits was only 4,500, we may assume that a substantial portion of the remaining 6,000 inhabitants who were employed were engaged in farming or in related occupations. From 1940 to 1960, the population of B increased from 2,867 to 4,522. The 1960 census data reveal a 28.7 per cent population increase in the decade 1950-1960.[15]

The population was ethnically rather homogeneous, only eight per cent being non-white. B shared with D the lowest average level of educational attainment.[15] In B, 14.6 per cent of the residents reported incomes of less than $3,000.00, while 17 per cent exceeded the $10,000.00 mark. The median income, except for E and C, was the lowest of the five areas.[15] With reference to population dynamics, there appear to have been neither many "flights to the suburbs," nor has there been the concomitant proliferation of shopping centers which traditionally accompany that process. In short, the important community services still appear centralized in the village square.

School-Community Relationships

The school system experienced a sharp enrollment increase during the ten-year period June 1952 to June 1962. The school membership increased from 1,009 to 2,686.[12] Though part of the increase was doubtless due to other sources (i.e., annexation, etc.), the sudden burgeoning enrollment is a potential variable in any analysis of factors contributing to the acceptance of change in the B school system.

The median income $6,270.00)[15] of B families was higher than those of either F or C.[15] The State equalized valuation was $8,136.00 per membership pupil,[1] a value which places B 369th in 534 school districts reporting in 1962-1963.[9] A comparison of these figures with other school districts in the study is shown in Table VII at the end of this appendix. Only C's valuation is lower, standing at $6,251.00 per pupil. In spite of B's relative financial advantage over C, a millage of only 9.4 was authorized by its voters.[2] This figure is by far the lowest of any of the systems studied, and it resulted in only $76.47 per pupil being provided by the community.[8] Though the State assigned no "hardship" funds to B, its total appropriation was, nonetheless, higher than that of any system under study. Yet, the State assistance of $203.47 per pupil, supplemented by $76.47, netted a total of only $279.94.[8] Of this amount, $277.62 or nearly the full amount represented the per pupil cost in 1962-1963.[8] Further financial complications were added by the State Legislature's failure to provide sufficient funds to meet the State's financial obligations to its school systems. The State owed $100,445.00 to the B school system as of July 1, 1962.[12]

In one report to the citizens of the district, the school board noted, after a tribute to recent progress, that ". . . The curriculum should be made more inclusive, and classloads [per pupil ratios] should be decreased."[12] All available evidence, however, would suggest that B was not meeting its financial responsibility to its school youngsters. While we may grant the assertion that school financing based on property and sales taxes is seriously incumbered and that on such bases equitable educational opportunity for all youngsters is precluded, B's school allocations still fall short of what the community might reasonably be expected to provide. The median income of B was higher than that of C ($6,270.00 versus $6, 190.00).[10] The assessed valuation per membership pupil was nearly $2, 000.00 higher than that of the neighboring district ($8, 136.00 versus $6, 251.00). Yet, the assessed millage per thousand-dollar valuation was only one-half as great (9.4 versus 18.1 mills).[8]

Some results are evident. Student-faculty ratios compiled by the County Board of Education were 29.1,[13] the highest of any school system reporting. In comparison, nearby C and A reported ratios of 24.0 and 24.2, respectively. Per pupil operating expenses placed B 499th (Table X) in 534 districts reporting, and its teachers' salaries for 1963-1964 showed the lowest average of the five districts at $5, 464.00 (Table VI).[10] Minimum and maximum salaries for holders of Bachelor's and Master's Degrees were lower than those of any of the other four schools. Beginning teachers who held the Bachelor's Degree started at $4, 500.00 and looked forward to a maximum $6, 200.00. Similarly, holders of the Master's Degree began at $4, 700.00 and upon reaching the maximum received $6, 500.00 (Table VI).[10] Further, only two full-time librarians were under contract, and by far the largest grouping of non-degree teachers were employed by the B school system (17%). Only twelve per cent of the teachers employed held Master's Degrees, and there were only one and one-half full-time counselors.[7] The nearby C school system employed three counselors.

School and Community A

Demography of Community A

City A has a population of approximately 108, 000 people.[15] It is not yet characterized by a marked degeneration of the core community into ghettoes and generally run-down physical surroundings. While districts in the near western and eastern regions show a distinct trend in that direction, a vast program of urban renewal seems to have anticipated events sufficiently to minimize the possible effects of such deterioration. It is the home of the State Capitol, several large automobile plants, and it is near a State university. Each of the above sources, together with other institutions of lesser magnitude, provide a somewhat higher property evaluation than is enjoyed in the surrounding, smaller communities.

The population is ethnically more heterogeneous than that of any of the other communities studies, save E. With respect to age composition, only 36 per cent of A's population was eighteen years old in 1960.[15] The only city in this study reporting a lower percentage was E. The great bulk of the population fell within the eighteen-to-sixty-four age bracket, while nine per cent had reached age sixty-five or more.[15] In the decade 1950-1960, the population increased by 17 per cent -- in marked contrast to E which reported a 10 per cent decrease.[15] The latter data suggest that A had not yet experienced that "flight to the suburbs" which played such a crucial role in the E schools during this study.

Table V at the end of this appendix shows the following job distributions in community A: operatives, 7, 153, (17%); clerical workers, 8, 500, (20%); craftsmen and foremen, 5, 895, (14%); service workers, 4, 696, (11%); and sales workers, 3, 711, (8%).[15] Table II lists the median income for A families at $6, 477.00, a figure surpassed only by one other community participating in this study -- D, at $7, 588.00.[15] Twelve per cent of the population had an annual income of less than $3, 000.00, and 17 per cent reported annual incomes of over $10, 000.00.[6] As of the 1960 census, 4.6 per cent were listed in the ranks of the unemployed.[15]

The median years of schooling completed in the community was 11.9, a figure which may reflect the presence of a large, State-supported university. Only one other district involved in this study reported a higher median educational attainment. In the neighboring community of C, which is also near to the University, the median educational level was twelve years.[15]

Only 1, 247 of a total population of 107, 807 worked outside the metropolitan area. Of the latter figure, almost one-half resided in the same dwelling in 1960 that they had occupied in 1955. Thirty-one per cent had moved from a different house in the same county. Only 14 per cent had moved from a different house in the same county, while five per cent had migrated from a different state.[15] These figures, together with a reported population increase of 17 per cent within the previous decade, suggest a relatively stable population with no marked migratory trends -- in or out.

School-Community Relationships

A State equalized valuation of $14,551.00 per membership child, when compared with C's $6,521.00, gave the metropolitan center an undisputed edge with reference to available financial support.[7] Yet, the picture is not that simple. Perspective demands some data on the neighborhoods within which the two schools studied were situated. Bureaucratic complications in a system employing more than 1,100 teachers, and a virtual plethora of community factors, contribute variables which must be considered -- particularly as they relate to social systems within the individual schools.

The enrollment of the entire school system for the fiscal year ending June 30, 1963, reached 28,900 students.[7] With a district-wide State equalized valuation of $420,523,000.00, the State equalized valuation per membership child may be approximated at $14,551.00.[8] In 1962-1963, A levied 20.7 mills on this valuation, producing revenue of $301.21 per pupil.[8] Hardship aid was also granted to A by the State. However, the total of $5,821.00 is negligible when contrasted with the total State appropriation of $5,015,728.00.[7] Total State aid amounted to approximately $173.56 per membership child, a figure which, when combined with revenue derived from local sources, totaled $474.77 per pupil.[8] This sum was the largest theoretically available among the five school systems. However, the actual expenditure or per pupil cost was only $431.41,[8] placing the system below E and fifty-third in a total of 534 systems examined by the State Department of Public Instructions.[9]

Of some 1,127 teachers employed, 11 had not attained their Bachelor's Degree while 302 held Master's Degrees.[7] The school system provided 23 consultants, 38 librarians, one audio-visual coordinator, two attendance officers, six psychologists, and five health personnel (nurses, etc.).[7] For 1963-1964, the average teacher salary was $7,129.00.[10] The minimum for the Bachelor's Degree stood at $5,000.00, a figure which was increased by $250.00 for those who held an M.A. Degree. The maximum salaries reported were $7,750.00 and $8,500.00 for the Bachelor's and Master's Degrees respectively.[10] The latter figure is $2,100.00 higher than the C maximum -- a differential which is hardly accounted for by variance in living costs in these two neighboring communities, and which would appear to place A at a distinct advantage with respect to the recruitment of qualified teachers.

Available census data suggest that the community served by one of the sample schools was moderately transitional.[14] Participant observer reports make frequent references to socio-economic status within the area, and to the "disruptive" character of the many changes in ethnic composition. Attendance records show that increasing numbers of Negro and Mexican students were being enrolled in the school -- with the attendant problems of language and marginality. The following incident, taken from a participant observer report, is indicative of one kind of problem occurring within this particular school:

> I asked [a teacher], "What's this business I've heard about Imo [another teacher] being prejudiced?"
>
> She said, "Well, two Negro women, one of whom has a child in about every grade, came over to school and planned to go to every room because they felt that some of the teachers were prejudiced . . . ."
>
> So I asked, "Did Imo use that word, 'nigger'?"
>
> She said, "Well, no, not to their faces," and began to laugh . . . .
>
> She said she thought the whole thing started with a little Negro girl from Imo's room. The little girl had a very offensive smell about her which Imo thought was due to something her mother had put in her hair. So she suggested to the little girl that she tell her mother not to put so much of that stuff on her hair -- whatever it was. Well, it turned out that it was the little girl's body odor . . . .
>
> She said that, when she [Imo] told the mothers this, they got so upset with her that they told her how prejudiced she was, and Imo started to cry. The office secretary came over and told the mothers to come back when the principal was there and could help to straighten it out . . . .
>
> She said that there is a feeling in the school that, with this kind of agitation appearing, something is being started up in the neighborhood, . . . and that there will be more trouble . . . ."[11]

In a similar vein, another teacher reported disquiet at the increased number of students who were being sent to school "unclean." Still another teacher noted that children came from rather poor homes and reported that, during "share-and-tell time," one boy said his mother broke her arm: "She fell down twisting in the bar." Several teachers from this school cited such incidents as indicative of the in-school tensions resulting from rapid residential changes.

The high degree of mobility in the community resulted in other problems for school personnel. The principal reported in mid-October that, since school commenced in September, the area had gained 31 new students and had lost 24 -- and that this was a slow year! Later in the school year, a teacher commenting on the mobility problem at the same school expressed her evaluation in terms of impact on discipline and control:

> We have more transients coming in and out -- more explosions, and more discipline problems of a more serious nature. Both the teachers and the children get tired. I am probably even cross. Yes, there is a change in that aspect. You know, whenever new children come into the system about this time, no matter what the teachers do to get them integrated into the class, they never quite fit in as well as those who came in at the beginning of the year.

The school building, situated in a neighborhood of older homes, was beginning to show some of the ravages of time. The janitor reported that he had requested a transfer from the school several times. Though he expressed affection for the teachers and principal, he noted that the school did not have many of the "modern conveniences," that there were "no elevators or power controls," and that even the sidewalks around the building were "coming up." Our research staff noticed no evidence of genuine hardships resulting from poor or inadequate facilities. Nonetheless, comparisons with other schools having more modern facilities cannot be ignored when examining teacher morale and innovation climate.

In the second of the two schools observed in A, community factors appeared not to be among the major concerns of teachers and school administrators. Discipline problems were infrequently mentioned in participant observer reports. Parents expressed at least overt interest in their children's education through comparatively well-attended P. T. A. meetings. (The P. T. A. meetings were poorly attended at the other sample school in this community.) However, our observer did report problems traceable to organizational red tape and to parent-teacher relations. Indeed, parent-teacher relations were a principal difference between the two schools in A. At the second school studied, office records showed that 70 per cent of the parents were high school graduates, and that their contacts with the school frequently concerned disciplinary problems and academic achievement. At the other school, on the other hand, instances of parental apathy or neglect, rather than active interest in the education of their children, more frequently found their way into the reports.

Bureaucratic encumbrances and community "pressures" were reported by the teachers in both schools. One teacher stated:

> This is my first year in A. I signed a contract five years ago and withdrew because I got cold feet, and because I didn't know that the school where I worked at that time would be annexed by A. We resented it because, in the larger system, we were told what to do. We previously had much to say about the way things were run. Now I'm not so harsh because I recognize the need for organization in a large system. But I'm more of a professional in a smaller school. Here, I don't have a final say in reforming a child. We need more professionalism, that is, more individual decisions on the part of teachers.[3]

Neither of the two A schools studied served as the center of community activity. This is in marked contrast to the community functions which were assumed by the C school district. This condition was verbalized by a teacher during a discussion with our participant observer of the problems of parental participation in school activities. The observer reported:

> We began talking about the school . . . and she said that that school was different than PS2, and that one reason was because it was the center of the community. "I mean the Boy Scouts have their meetings there -- big, happy family things. Their P. T. A. is always packed. More parents came to see me there than come here to PS2 and to the whole P. T. A. put together." She said that the school was ". . . a kind of social thing, where the school is just like church. It's the center of activity."[11]

Teachers also felt certain bureaucratic restrictions accruing from a recent directive regarding prayers in the school system. Some claimed that they did not understand the objectives of this decree, and certain members of that group expressed a desire to be more fully briefed on the expectations of the administration with regard to prayers in classrooms. The teachers were also required to submit book lists to "higher powers" for approval. Our observer reported a conversation with one of the school librarians as follows:

> She tells me that before the library can put in a book, it has to be approved by different councils. She gave me the names of a few. . . . I asked her why and she said, "So if a parent doesn't approve of a book, the school will have something to back it up, saying that it had the approval of so and so, and so and so."[11]

Certain community pressures are also felt by some teachers. One teacher reported that:

> The reason why my husband left education was pressure: pressure from the public, from unprofessionals -- the janitor, the secretaries, etc. It never seemed right to me that educators were dictated to by men who weren't professionals. We have to ask a business man on our Board who has no way of knowing.[3]

School and Community E

Demography of Community E

The Bureau of the Census defines an industrial area as ". . . having as its nucleus an important manufacturing city, and comprising the county in which the city is located, together with any adjoining county or counties in which there is a great development of manufacturing industry."[15] The designation is appropriate for E. The city is the focal point of a population center of 138 square miles, within which 70 per cent of the population dwells.[14] The county coincides perfectly with the school district which we studied.

The city itself is composed of diverse ethnic groups, comprising a total population in 1960 of 1, 670, 144.[15] The non-white population (29%)[15] is sufficiently large, well-educated, and well-paid to have established a "consciousness" as a subordinated social class. Consequently, social conflicts have occurred from time to time. Occasionally, the conflict has been widespread and violent. Within recent years it has found its way into the public schools.

As reported by the 1960 census, a total of 612,295 people were employed in E. But the outlying districts of the county alone sent that figure spiraling to well above the million mark. Thirty-seven per cent of those employed were engaged in manufacturing, while 40 per cent identified themselves to the census takers as white-collar workers. The occupational distribution, based on the 600,000-plus workers noted above, includes 140,000 operatives, (23%); 102,000 clerical, (16%); 80,000 craftsmen and foremen, (13%); 63,000 service workers, (10%); 61,000 professionals, (10%); 46,000 sales workers, (7%); and 36,000 managers, officers, and proprietors, (6%).[15]

The automotive industry forms the basis of the area's economy, and employs approximately three-fourths of the labor force engaged in manufacturing.[15] In a recent report, the City Planning Commission noted that there was "little possibility" that E would ever become a major trade center. Consequently, trade and services are expected to remain secondary sources of employment. For the present, the community will be dependent upon the primary employment afforded by the automotive and related industries. Addressing itself to the unemployment problem, the Commission noted that a diversification of industry and employment was needed. (In 1960, 9.9 per cent of E's working people were unemployed. This figure is larger than the unemployment figures in the other three out-state districts involved in this study, and is approximately the same as for D, which was developing out of the urban fringe near E.[15])

With few exceptions, the upper-status groups have moved to the outskirts of E, or to suburban communities. And, as a result, the population of the central city has dropped by 9.7 per cent during the decade, 1950-1960.[15] The community has thus developed almost exclusively in concentric zones, with prosperity increasing proportionally as one moves out from the central city. Generally, unskilled new migrants, together with minority groups, compose the population of the central sector. Thus, not uncommonly, peoples of similar socio-economic status tend to be clustered together.

A recent survey by the City Planning Commission[6] revealed that the respondents believed there were two crucial issues facing E. "Negroes" and "housing problems" were most frequently mentioned as problems E "needs to do something about." Approximately 40 per cent of the population favored improvement of race relations on a non-segregated, equal-rights basis. This left, however, 60 per cent who still oppose equality of opportunity. However, most respondents felt that race relations were improving . . . .

The median income for the city was $6,069.00, the lowest of any city of the study.[15] Further, families receiving less than $3,000.00 made up 17 per cent of the population. This was, as Table II indicates, the largest percentage falling below the $3,000.00 figure of any of the communities being investigated. Seventeen per cent of the families did, however, report an income of over $10,000.00.[15] The median school year completed in E was only 9.9 years -- which is also the lowest percentage reported for any of the systems under study.[15]

The areas most frequently selected by socially and culturally deprived migrants to the city, as well as the direction of mobility for those who became more prosperous, have already been discussed. We may, however, briefly consider the factors relevant to population dynamics. Changes in residence during the half decade 1955-1960 were frequent in E. However, the mobility tended to occur within the county. Only ten per cent of the population lived in the same dwelling during that five-year span, but nearly two-thirds lived in a different house in the same county.[15] Each of the above demographic factors related directly to the problem which the E school system faced in its attempt to minimize the undesirable aspects of the ghettoes of the central core.

School-Community Relationships

Two focal issues contributed greatly to structuring the climate in the E schools during the year of our study. The first was the failure of a bond issue which created, at least, the threat of an impending drastic curtailment in educational expenditures. The second concerned a decision by the school board to bus students from economically and socially depressed areas of the central region of the city to less crowded, middle-class, and predominantly white, peripheral schools.

Before examining this occurrence within the context of the two E schools, a general overview of the pre-crisis financial perspective is in order. E, though harboring numerous and burdensome depressed regions, provided the highest valuation per membership pupil of any system examined. Table VII, at the end of this appendix, lists that figure at $17,895.00, which is by far the largest per pupil valuation, and which dwarfs the meager $6,251.00 of equalized valuation against which taxes may be levied in support of each school child in C.[7] During the 1962-1963 academic year, the millage levied in E was 15.2, a rate yielding a total of $172.00 per membership pupil.[8] This amount, combined with the State appropriation, produced a total of $433.83 per child for that year,[8] and again stood in marked contrast with $279.94 available for each youth in attendance in B.

Among the services available to E schools (in part, as a result of this financial support), were those of 269 full-time guidance counselors, 24 psychologists, 45 teacher-consultants and supervisors, and 220 librarians. While only 527 teachers (8.8%) held Master's Degrees, another percentage point may be added by the 37 Ph.D.'s employed by the system.[7] In 1962-1963, the average salary was reported at $7,451.00, a figure which was higher by at least $1,000.00 than any other system studied, and which placed E ninth in 534 districts reporting to the State Department of Public Instruction.[10] As might be expected, given the high cost of living generally anticipated in a metropolitan region, minimum salaries for the Bachelor's and Master's Degree were higher than in any other system studied. The same was true of the Bachelor's maximum. However, the top of the scale for those holding Master's Degrees ($8,100.00) fell $400.00 short of the highest figure of $8,500.00 paid to holders of the Master's Degree in A.[10]

The E-7 Elementary School -- At this school, the question of "integration" frequently dominated other topics of discussion in the Faculty Room. The E school system had, in recent years, intensified efforts to improve the quality of education provided children in depressed areas. As noted above, these neighborhoods were situated in and around the central core of the community. Here the schools were old and over-crowded, and it was difficult to provide incentives sufficient to encourage competent teachers to remain. Many teachers stated that they were not anxious to be assigned to what they apprehensively called a "jungle." Focusing directly upon such teacher reluctance, one remedial action was approved by the E Board of Education and inaugurated in 1959. In this, the "Great Cities Project,"[1] the E school system underwrote the entire financial obligation. The total added expenditure amounted to slightly less than 10 per cent of the current cost per pupil included in the project.

One of the major objectives was a "reorientation" of the teachers selected to staff the participating schools. The task was undertaken through a series of workshops and in-service training programs. The study director explained, "We need the teacher who is fearless and attempts new things regardless of the administrative structure, and regardless of the things which often infringe on the teacher's freedom." He noted further that ". . . teachers are often security bound, and don't take advantage of their prerogative of movement." Thus an effort had been made to help teachers in these inner city schools to ". . . acquire the feelings and attitudes of the anthropologist, the sociologist and the educator all at once."

Numerous other changes were also instituted -- including modification in the assignment of visiting teachers (counselors), and revisions of curricula to include developments such as the now celebrated primer series, "Jimmy." The objective of these new primers is to include more drama and humor as well as to "integrate" the characters. The experiment yielded data indicating that increases in aptitude scores (I. Q.), achievement scores, parental participation in school activities, and public and private agency involvement resulted.

Another and more controversial aspect of the School Board's assault on the culturally and socially alienated, further involved the E-7 Elementary School. In an effort to relieve overcrowding in the schools of the central city, student personnel were bussed to less-crowded schools located in the middle-class neighborhoods and distributed throughout the peripheral regions of the city. The climate prevailing at the E-7 School was greatly structured in the context of issues pertinent to the latter plan, for E-7 was one of the "middle-class" schools selected as a recipient of "bussed-in" students. The school had been remodeled to accommodate junior high school as well as elementary classes and the students who were bussed to E-7 were enrolled in the seventh and eighth grades only. As might have been expected, there was some staff distress. One teacher stated:

> Having lower class kids brings down more A's and increases problems. I get more pleasure from teaching children from homes with views similar to mine. Many of these new children have emotional problems . . .[3]

Specifically addressing herself to questions of teaching method, another teacher reported:

> Community resistance to integration has not affected what I teach but how I teach. Community unrest has affected children and comes from the prejudice of their parents. Integration should have been started in the lower grades. Too many behavior problems occur at the junior high school level. The Negro children do not have the same level of training as the white students. They have a different cultural background. Moreover, aggressions come from the Negroes, and there is more resentment when you have to discipline them. They tend to resent authority.[3]

Clearly, some teachers believed that the experiment had not functioned as had been anticipated by the school board. With rare exceptions, those teachers expressing specific opinions were apprehensive and ambivalent, if not negative, with respect to the advisability of transporting students from "the jungle" to the outlying areas. Comments such as the following were common: "It's complicating the situation," "it's making the parents mad," and, "they're bussing in the students who should have gone to a school nearer the Negro district." Some teachers perceived, or thought they perceived, inconsistencies resulting from an admixture of the "classes." However, qualifications such as "Perhaps it's only a problem of transition," were frequent and suggest that many teachers saw an eventual resolution of the dilemma.

Parental involvement in the question of integration appeared early in the school year. Indeed, one of the first participant observer reports noted that parents were ". . . very upset about the bussing in of students and are beginning to take action to stop it."[10, 11] As to the nature of that action, an E newspaper report of September 12, 1962, gives some clarification, ". . . a parents' committee from the E-7 School appeared to protest a plan to establish a junior high school at E-7, and to erect transportable buildings on school property to accommodate elementary classes. . . . E-7 parents said they didn't want a junior high there, and that their own children were being '. . . pushed around to make room for children from another school.'"[5]

Both before and after the plan was inaugurated, parental complaints were received by the school. A teacher revealed the following opinion to our participant observer:

> . . . Now we're bussing in these lower class children, and already parents have been complaining that their children have been coming home with words in their vocabulary that

they had never heard before. [The teacher added, incidentally, that she did not believe that mixing the lower classes with the middle class would work at all.][11]

In an effort to alleviate what appeared to be growing unrest among parents, the principal addressed the P. T. A. members "to calm them down." This action was viewed as having eased the situation. However, some problems persisted throughout the duration of the study.

Perhaps due in part to the flurry surrounding the integration question, the millage issue was perceived as being less crucial by E-7 respondents. This generalization is borne out by a review of the personal interview schedules, written questionnaires, and participant observer reports. The failure of the bond issue did, however, precipitate a more or less shocked response with regard to the possible consequences. And the tenor of the comments indicated a feeling on the part of some school faculty members that the community was not as fully behind them as they had previously believed. When questioned about relationships with the community, for example, one teacher registered a most negative attitude: "They downed the millage, increased the number of students in the classes, and denied the necessary equipment."[3] Another teacher retorted, upon being asked about community relations:

> "Until April 1 [the election], I thought that the public was aware of what we're doing. Now I'm not so sure. The failure of the millage was tragic, and the kids will pay because they won't receive the attention. I have no time to spare. And there's a kind of degeneration of values here that demands more time. I have a class that shows the most disrespectful attitude I've ever dealt with. They have constant fights with one another, and discipline is a constant problem.[3]

Another teacher expressed her dissatisfaction as follows:

> Before the millage, my answer would have been different. You have to adjust to the fact that people aren't as solidly behind you as you thought. This will affect our effectiveness. We won't have money for field trips, etc. Also, with mixed classes, one must be careful as to where to take the kids since parents object to their being out on field trips with Negroes.[3]

It must be noted that our study did indicate that some faculty members felt a lack of support and respect from parents. One teacher noted, "Parents won't do us the courtesy of asking for appointments." These kinds of complaints were not, however, excessive. In sum, it would appear that the two issues which were most current at the E-7 School were integration and the millage question. In neither instance was there evidence of teachers taking any active leadership in the resolution of the problem.

The E-8 Elementary School -- This school was also transitional. However, the full impact of integration was only beginning to be felt at the time of our study. Through one pair of teacher eyes, the changing community situation was reported as follows:

> This is a cooperative community. I've always been in this school. It's grown from good American stock to a community that is less desirable. You get a lot of southern Kentucky types. That pulls records down. The urban area is changing. There is still some stability.[3]

Another teacher expressed herself to our observer in a similar vein:

> The residential area around the E-8 School is in a transitional period now. Years ago, about five years ago, ninety per cent of our graduating classes that went on to high school went down to Local College. They felt that this was something to be really proud of. Also, E-8 had the highest academic rating of any school in the city. The situation has changed now. Many of the upper-class or middle-class people are moving to suburbia. The community is getting more of an uneducated, laboring-type class moving into the area now.[11]

As of the time of our study, few Negro youth were enrolled at E-8. However, the school appeared on the superintendent's list as one of the buildings not filled to capacity. Consequently, some teachers were aware that E-8 might be asked to accept students from the crowded central sector at any time. The teachers also believed themselves to be one of the next schools to be integrated for other reasons. The following participant observer report clarifies this statement. Upon being asked whether she believed that the students were being bussed in because the schools in the downtown district were overcrowded, one faculty leader retorted:

> Don't let them kid you. It's just their way of integrating the schools. . . . She again brought up what I had heard before -- that there were schools closer to the colored schools that could stand a heavier load of children. However, instead of moving the classes to these schools, they were being moved out to the all-white schools. She said, "No matter what they call it, it's integration."[11]

On two other occasions, an administrative official expressed herself with reference to the effect of race relations on the millage issue and on teacher recruitment. Regarding the millage issue, she believed that:

> Millage would never pass because they had spent half of the bond issue down on the central district which is one hundred per cent colored -- for new schools down in that area. He said that the school that he used to be in was integrated because it was in a Negro area. They always referred to the colored children as ninety-nines. That is, if they had a phone call and it pertained to a colored person, if it was parents or someone else, so that nobody would know what they were talking about, they would use this code. Ninety-nine meant that it was a Negro case.[11]

With regard to teacher satisfaction and recruitment, some respondents viewed integration as one explanation for the fact that it was difficult to keep teachers from moving to the more lucrative suburban school systems.

In spite of the above indications of approaching complications, integration was not the crucial issue at E-8 Elementary School. The documentation above, however, does attest to a growing uneasiness on the part of some teachers and administrators.

School and Community D

Demography of Community D

Community D resembles C in many respects. But D is newly-carved from the fringes of a large metropolitan area. Indeed, the community has been incorporated only since June 13,

1955. The business district is distributed over the land in the pattern of those communities in which land speculators and developers vie for central locations. On one corner, a bank rises from open fields. A mile or so distant, one finds a cluster of drugstores, filling stations, and a rug cleaning shop. Across the corner, a housing development is being constructed. And, in still another portion of the city, a small shopping center has been established. With the exception of the main thoroughfares, a large portion of the streets still remain unpaved. In short, one is impressed by uncoordinated accumulations of residential, commercial, and special services interspersed among large parcels of vacant land.

The community presented the highest proportion of population under eighteen (42%)[15] and had, by far, the lowest percentage population having attained sixty-five years of age of the five districts studied (5%).[15] Although the figures are not available as to increases in size since 1950, the proportion of newer homes, schools, and other community service units together with the recent incorporation would suggest a rather rapid growth rate. According to the 1960 census, the population within the community boundaries numbered slightly over 19,000 inhabitants. Of this number, only two-tenths of one per cent were listed as non-white.

Census data reveal that 43 per cent of those employed were engaged in manufacturing and that 43 per cent held white-collar positions. The total occupational distribution included 21 per cent employed as craftsmen, foremen, or related workers; 20 per cent as operatives; 13 per cent as professional, technical or kindred workers; 11 per cent as clerical or kindred workers; 10 per cent as laborers; 8 per cent as officers, managers, or proprietors; and 8 per cent as sales workers.[15]

The high unemployment rate of 7.7 per cent was comparable only with E, and the relatively low median level of educational attainment (11.6) is also similar to that of the nearby central city.[15] These data, together with those attained from demographers familiar with the region, and from knowledgeable, local people, lend some credence to the assumption that a large portion of the population was employed by industries situated around the central city.

Of the five communities involved in the study, D reported the lowest percentage of families receiving an income of less than $3,000.00 a year.[15] It also had the highest median income of

$7,588.00, and compared favorably with the other communities as to the percentage of incomes over $10,000.00 per year (17.5%).[15] These data appear to be compatible with reports that D had been the recipient of many migrants from the central city -- although few data with reference to mobility in D are, as yet, available. In any event, though a relationship between D and the larger central city is apparent, age differentials and high median incomes, together with the factors previously discussed, present potential variables with reference to differences in the quality and kind of educational facilities available in D and E.

Before considering the school district as an entity, it may be well to note briefly elements bearing upon the fledgling status of the newly-formed community. Though approximately 50 per cent of the population lived in the same house in 1940 as they had occupied in 1955, 21 per cent of the population had occupied a different house in the same county.[15] (Note: D is located in a different county than is the central city.) Only one per cent had migrated from a different state as compared with a six per cent total reported by the central city. What is perhaps most telling, is that only 685 out of a population of 16,681 occupied the same house in which they had lived in 1939.[15] That figure, amounting to four per cent, compares with seven per cent for the central city.

School-Community Relationships

D's State equalized valuation was $11,018.00 per resident pupil, a figure which located that district approximately midway between C and E ($6,251.00 and $17,895.00, respectively).[7] A school tax levy of 17.7 mills provided a possible $195.00 per child from local sources.[8] The community did receive a $461.00 assist from the State in the form of hardship aid.[7] However, the figure is negligible when contrasted with the total State appropriation of $773,651.00.[7] From the latter sum, our calculations show that $188.19 per membership child was available during the year of our study.[8] The grand total attained by summing the local revenues and the State allocations amounted to $383.26 per membership child in D. That figure again left D at the median, with A and E boasting higher resources, and C and B being less-favorably situated. Of the $383.26, $371.94 more closely approximated the actual per pupil costs at D. Another study (Table X) placed D eighty-fifth in 534 schools reporting per pupil costs to the State Department of Public Instruction.[9]

From these funds, D provided the services of five supervisor-consultants and four guidance counselors.[7] However, the system reported only one full-time librarian, and no psychologists appeared on the payroll.[7] Further, five teachers (3.5%) had not yet obtained their Bachelor's Degrees.[7] D also employed the smallest percentage of teachers holding Master's Degrees or above (9.2%).[7] During the 1962-1963 academic year, the average teacher's salary was $6,120.00.[4] This expenditure placed D sixty-seventh of 534 schools tendering reports to the State Department of Public Instruction.[10] Minimum and maximum salaries were $4,750.00 and $7,220.00, respectively, for holders of the Bachelor's Degree; while their colleagues, at the next academic rank, the holders of the Master's Degrees, received a minimum of $5,050.00 and a maximum of $7,520.00.[10]

The problems perceived by the teachers of the D system did not yet appear to be centered on the frustrations resulting from bureaucratic encumbrances. The system was still experiencing "growing pains" and had consequently been expanding its energies on establishing the kind of organizational efficiency which would seemingly promise increased services to teachers and to children at minimal expenditure. It is precisely this organizational efficiency which, in some instances, resulted in bureaucratic restraints which weighed heavily on the teachers of the larger and longer established systems. It may be surmised from the frequency of teacher references to bureaucratic restrictions in the larger systems that the question bears greater saliency to teachers' frustrations in these units than it appears to have carried in D and systems of comparable size.

A kind of orientation which centers on "system building" appears in a comment made by one teacher during her interview:

> D is in growing pains. It must go a long way to compare to nearby ----- [a high-income level suburban community]. Our superintendent wants a system like -----. D isn't ready. The physical education program isn't adequate. Special teachers are needed in art and music, but the last millage was used for administrative salaries.[3]

Similar comparisons with the neighboring system again suggest an orientation toward "system building" and the attainment of comparable facilities and services. The following quotation is an excerpt from the participant observer report of an informal faculty meeting:

> . . . It then got into the salary schedule of [nearby] ----- and Mr. H began quoting the figures -- along with Mrs. J. They agreed that, with a Master's Degree, one could earn something like $9,000.00 at -----. Mrs. J said it was hard to imagine -- we really didn't realize how far D was behind until we saw something like this. Mrs. K agreed with her.[11]

Certain of the following items suggest that some progress had been made toward "system building" and the improvement of services rendered by the local school system. A significant number of these items would clearly contribute, directly or indirectly, to concomitant organizational efficiency. During the period 1958-1963, the number of non-degree teachers was reduced from 14 to 5 or 79 per cent. A second speech correctionist was hired, and the high school foreign language instruction was changed to a laboratory course with the aid of federal funds (N.D.E.A.). The federal government also helped underwrite the addition of more counselors and a guidance secretary. A diagnostician was hired jointly by D and a nearby community. Construction was begun on two new special education classrooms. A curriculum committee chairman was appointed from the faculty and was given one free hour per day to handle his assignment. These were among the improvements which were attained. However, limited funds, and rapid expansion, were generally regarded as major impediments -- by the school administration and by the faculty.[11]

TABLE I

Age Distribution in Communities of Schools Studied

Schools of Community	Percentage of Teachers		
	Under 18	18 to 64	65 and Over
A	36.1	54.9	9.0
B	38.7	50.8	10.5
C	42.1	52.5	5.4
D	42.8	52.7	4.6
E	32.8	57.7	9.5

TABLE II

Distribution of Family Income in Communities of Schools Studied

Community	Family Income in School Study Communities		
	Percentage Under $3,000.00	Amount of Median Income	Percentage Over
A	12.2	$6,477.00	17.0
B	14.6	6,270.00	17.4
C	10.4	6,191.00	12.4
D	9.2	7,588.00	27.5
E	17.4	6,069.00	17.8

TABLE III

Percentage Unemployed in Communities of Schools Studied

Community	Percentage Unemployed
A	4.3
B	2.1
C	4.6
D	7.7
E	9.9

TABLE IV

Median School Years Completed by Adults in Communities of Schools Studied

Community	Median School Years Completed
A	11.9
B	11.6
C	12.0
D	11.6
E	10.0

TABLE V

Distribution of Occupations in Communities of Schools Studied

Occupation	Community A		Community B		Community C		Community D		Community E	
	No.	%	No.	%	No.	%	No.	%	No.	%
Professional, Technical	5,011	11.8	243	14.9	169	10.1	874	13.6	61,474	10.0
Farmers	174	.4	---	----	---	----	58	.9	113	.02
Managers, Officers	3,138	7.4	187	11.7	138	8.2	528	8.2	36,448	6.0
Clerical	8,550	20.1	260	15.7	257	15.4	877	10.5	101,818	16.3
Sales	3,711	8.4	109	6.8	160	9.6	519	8.1	46,259	7.6
Craftsmen, Foremen	5,895	13.9	202	12.6	338	20.2	1,331	20.7	80,338	13.1
Operatives	7,153	16.8	266	16.7	320	19.1	1,260	19.7	139,679	22.8
Household	859	2.0	59	3.7	15	.9	100	1.6	15,655	2.6
Service	4,696	11.0	182	11.4	163	9.7	458	7.1	63,307	10.3
Farm Laborers, Foremen	51	.1	13	.8	---	----	40	.6	214	.04
Laborers	1,071	2.5	90	5.6	40	2.4	199	3.1	27,283	4.5
No Report	2,399	5.6	6	.4	73	4.4	197	3.1	39,702	6.5
Total	42,562	100.0	1,597	100.0	1,673	100.0	6,441	100.0	612,095	100.0

TABLE VI

Teacher's Salaries in the Schools Studied*

Schools of Community	Number of Teachers	Average Salary	Qualifications and Salary			
			Bachelor's Degree		Master's Degree	
			Minimum	Maximum	Minimum	Maximum
A	1,127	$7,129.00	$5,000.00	$7,750.00	$5,250.00	$8,500.00
B	112	5,464.00	4,500.00	6,200.00	4,700.00	6,550.00
C	115	5,486.00	4,570.00	6,300.00	4,700.00	6,400.00
D	148	6,560.00	4,750.00	7,220.00	5,050.00	7,520.00
E	9,352	7,228.00	5,100.00	7,800.00	5,400.00	8,100.00

*The figures are taken from a study by Thomas J. Northey and Stanley Hecker for the State Education Association.

TABLE VII

Revenue Sources and Per Pupil Costs for 1962-63 in Communities of Schools Studied*

Item	Community and Amount				
	A	B	C	D	E
State Equalized Valuation (SEV)	$420,523,000	$24,490,000	$19,690,000	$45,296,000	$5,264,577,000
Enrollment	28,900	3,010	3,150	4,111	294,195
SEV per Resident Membership Pupil	$ 14,551	$ 8,136	$ 6,251	$ 11,018	$ 17,895
State Appropriation:	$ 5,015,782	$ 612,456	$ 610,008	$ 773,651	$ 47,610,874
Primary Fund	$ 950,209	$ 88,830	$ 88,976	$ 128,027	$ 12,427,894
State Aid	$ 4,051,752	$ 523,627	$ 498,772	$ 645,166	$ 35,182,977
Hardship Aid	$ 5,281	$ -------	$ 22,260	$ 461	$ -------
State Appropriation per Child	$ 173.56	$ 203.47	$ 193.68	$ 188.19	$ 161.83
Local Millage	20.7	9.4	18.1	17.7	15.2
Local Taxes	$ 6,282,170	$ 223,623	$ 276,576	$ 748,001	$ 80,149,336
Local Taxes per Child	$ 301.21	$ 76.47	$ 113.14	$ 195.01	$ 272.00
Total Funds Available per Child	$ 474.77	$ 279.94	$ 306.82	$ 383.20	$ 433.83
Total Current Operating Expense	$ 12,467,831	$ 835,635	$ 956,222	$ 1,529,046	$ 129,098,466
Per Pupil Costs	$ 431.41	$ 277.62	$ 303.56	$ 371.94	$ 438.82

*Data compiled from reports filed with the State Superintendent of Public Instruction.

TABLE VIII

School Personnel Employed Full Time in Communities of Schools Studied*

Position	Number Employed in Community				
	A	B	C	D	E
Supervisor-Consultant	23	0	0	5	45
Librarian	38	2	3	1	220
Audio-Visual	1	0	0	0	0
Guidance	**	1.5	3	4	269
Attendance	2	0	0	0	123
Psychologist	6	0	0	0	24
Health	5	0	0	0	0

*Derived from data supplied by the State Department of Public Instruction.

**Data not available.

TABLE IX

Academic Qualifications of Teachers in Communities of Schools Studied

Community	Academic Qualifications							
	Non-Degree		Bachelor's		Master's		Doctor's	
	No.	%	No.	%	No.	%	No.	%
A	11	1.2	611	66.1	302	32.7	0	--
B	18	16.2	80	72.1	13	11.7	0	--
C	1	.9	90	81.8	20	18.0	0	--
D	5	3.5	123	87.2	13	9.2	0	--
E	Not given		Not given		527	9.8	37	.7

TABLE X

Comparison and Ranking* on Educational Factors of Communities of the Schools Studied

Community	State Equalized Valuation per Resident Pupil		Total Resident Membership		Per Capita Operating Expenses		Average Salary of Teachers	
	Amount	Rank	Number	Rank	Amount	Rank	Amount	Rank
A	$14, 172	49	26, 453	4	$421. 35	53	$6, 516. 08	38
B	8, 621	369	2, 699	123	271. 61	499	4, 985. 75	312
C	6, 651	478	2, 235	150	296. 02	396	4, 628. 79	392
D	10, 872	268	3, 783	85	385. 90	85	6, 120. 56	67
E	19, 115	50	288, 113	1	422. 92	52	7, 451. 67	9

*The ranking is in terms of 534 school districts reporting to the State Department of Public Instruction.

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APPENDIX C

A METHODOLOGICAL NOTE

Scaling Procedures

The procedure followed in developing the Emotion, Control, and Change Scales is a combination of techniques taken from two sources: a scoring procedure for the scale items following Coombs,[1] and a scaling procedure developed by Rasch.[2] This appendix presents a brief discussion of the method of constructing the present scales, some of their properties, and a mathematical justification for combining the two techniques.

It should be pointed out that this appendix does not constitute a how-to-do-it manual. The reader interested in the technical details of the two procedures and in their underlying rationale is referred to the original sources where these two aspects are developed in detail.

Scoring the Scale Items

Items for the three scales were scored following the procedures outlined by Coombs in his discussion of "triangular analysis."[1] Rather than scoring an individual's responses to the alternatives of each scale item, e.g., "completely agree," "agree," etc., this procedure scores each item in terms of the item "midpoints" which are the k-1 points midway between each of the k alternatives for each item:

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[1] Clyde H. Coombs, A Theory of Data (New York: John Wiley and Sons, Inc., 1964).

[2] G. Rasch, "Probabilistic Models for Some Intelligence and Attainment Tests," Studies in Mathematical Psychology, I (Copenhagen: Nielsen and Lydiche, 1960), pp. 62-93.

> The procedure is very simple, being that of constructing all the admissible dichotomizations for each item. For example, an item with 5 alternatives may be dichotomized in 4 different ways: a/bcde, ab/cde, abc/de, abcd/e. Each of these dichotomizations is at a midpoint between two adjacent alternatives; the first is at the ab midpoint, the second at the bc, then the cd, and the last the de.[2]

An individual will have a score for each midpoint, or dichotomization, of every scale item -- as illustrated in Figure 1, below:

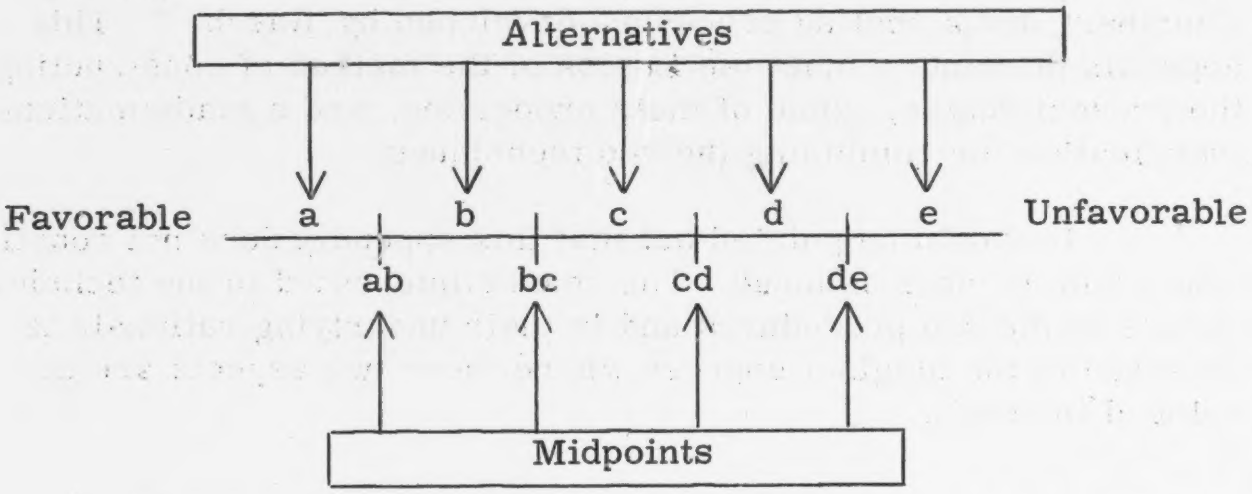

Figure 1.--Scale Item Alternatives and Midpoints.

Suppose that alternative "a" is chosen by an individual, and that this choice indicates a "favorable" response to the item in question.

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[1] Coombs, op. cit., pp. 224-236.

[2] Ibid., p. 234.

Then, for each of the k-1 dichotomizations, it is assumed that the individual is favorable to the *left* alternative. That is, that he is *to the left* of every midpoint. (See Figure 1, on the preceding page.) If alternative "b" is chosen, then the individual is "favorable" to all alternatives *to the right* of the "ab" midpoint, and unfavorable to the "ab" midpoint -- and so on. Some suitable convention is adopted to indicate whether an individual is favorable or unfavorable to each midpoint, and the respondent's favorable and unfavorable responses are recorded for each midpoint. A raw score matrix is then constructed with *rows of individuals* ranked from "favorable" to "unfavorable," and with *columns of item midpoints* in the order of frequency with which "favorable" responses were made to them. As long as the order of the midpoints for any given item is not changed in constructing the matrix, the midpoints of different items may alternate with one another. Furthermore, a matrix may contain items which have different numbers of alternatives -- and hence different numbers of midpoints.

This procedure was followed for each of the three scales used in the study. Scale scores indicating each individual's degree of "favorability" on each scale were then computed, following a technique developed by Rasch.[1] Although designed for test items which have only two alternatives, it can be shown that the technique holds for items with any number of alternatives -- when these alternatives are scored and recorded according to the procedures just described. Thus:

Consider a k-alternative item. If p_i is the probability that a given person can endorse alternative i and $p_{i(j)}$ is the conditional probability that a person can endorse item i given that he can endorse item j we shall assume:

i) $p_i \geq p_{i-1}$
ui) $p_i\,(i+1) = 1$

We shall further assume that a person responds with the most favorable alternative he can endorse. Then, if R_i is the probability of responding with alternative i,

$$R_k = p_k \qquad\qquad R_j = p_j - \sum_{r=j+1}^{k} R_r$$

$$= p_j - p_{j+1}$$

---

[1] Rasch, *op. cit.*

If alternative j is given as a response,

$$\text{Define } \alpha_i = 1 \qquad i \leq j$$
$$= 0 \qquad i > j$$

Then:

$$P(\alpha_i = 1) = \sum_{j=i}^{k} R_j = \sum_{j=i}^{k} (p_j - p_{j+1}) + p_k = p_i$$

Then if under these assumptions, which are essentially those made by Coombs, an analysis of the α_i's is an analysis of the person's momentary tendencies to endorse each alternative.

After the raw score matrix has been constructed, items and respondents may be grouped according to approximately equally difficult items, and according to respondents with approximately equal raw scores. This grouping, by increasing the number of items and respondents, and by reducing the variations, tends to increase the accuracy of the estimates of the parameters needed in the scoring procedure.

A second matrix is then constructed from the grouped raw score matrix by computing the percentage of individuals in each raw score group who have given favorable responses to each item or item group. The model assumes that those individuals who are more favorable toward a set of attitude items are more likely to respond favorably to those items which receive fewer total favorable responses (i. e., the more "difficult" items) than are individuals who are less inclined to make favorable responses. If this assumption has been met, then the percentages should increase across the rows -- since the items were ordered in terms of the total frequency of favorable responses which they received. Similarly, the percentages should also decrease going down the columns, since individuals were ordered in terms of the number of items to which they gave favorable responses.

A final matrix is then constructed by taking the log of each of the percentages in the preceding matrix. For reasons of space, only this matrix is presented for each of the three scales used in the present study. (See Tables I, II, and III at the end of this appendix.)

The fit of the scale to the model is determined by a number of graphical tests. The most stringent of these tests involves plotting, for each raw score group of respondents, the logs of the percentages against the average log for the item groups; and plotting, for each item group, the log of the percentage of favorable responses against the average for each raw score group of respondents. If these data fit the model, the plots should fit straight lines with unit slopes. Each of the study scales showed a very close approximation to this requirement, and it was concluded that the model provided a reasonably good fit for these data. . . .

TABLE I

Logistic Transform of Per Cent of "Correct" Responses for Control Scale

Respondent Group and N	Grouped Scale Midpoints					Σ	lr.	lr*	$\xi^{(r)}$	Scale Values $\xi^{(r)1/2}$
	A	B	C	D	E					
1, N = 18	- .04	1.11	1.51	1.51	1.69	5.78	1.16	.86	7.42	2.72
2, N = 14	- .25	.38	.48	1.38	1.69	3.68	.74	.60	3.98	1.99
3, N = 18	- .41	.12	.41	.55	1.69	2.36	.47	.28	1.91	1.38
4, N = 30	- 1.00	- .02	.73	.98	.99	1.68	.34	.16	1.45	1.20
5, N = 14	- 1.00	- .28	.33	.48	1.11	.64	.13	.00	1.00	1.00
6, N = 18	- 1.30	- .40	- .19	.69	1.20	.00	.00	.00	1.00	1.00
7, N = 12	- 2.00	- .70	- .14	.39	1.20	-1.25	- .25	-.42	.380	.62
8, N = 25	- 2.00	-1.30	- .30	- .11	.70	-2.41	- .48	-.84	.145	.38
Σ	-10.00	- .49	2.83	5.87	10.27	---	---	---	---	---
l.i	- 1.25	- .05	.28	.59	1.27	---	---	---	---	---

TABLE II

Logistic Transform of Per Cent of "Correct" Responses for Emotion Scale

Respondent Groups	Grouped Scale Midpoints					Σ	lr.	lr*	$\xi^{(r)}$	Scale Values $\xi^{(r)1/2}$
	A	B	C	D	E					
1	- .35	.51	1.38	1.38	1.38	4.30	.86	1.10	12.57	3.55
2	- .80	- .46	.16	.91	1.12	1.85	.37	.30	1.99	1.41
3	-1.52	- .72	- .10	.95	1.06	.33	.07	- .04	.912	.96
4	-1.52	- .60	- .27	.25	.45	-1.69	-.34	- .20	.630	.79
5	-1.70	- .80	- .55	.07	.12	-2.86	-.57	- .40	.398	.63
6	-2.00	-1.40	-1.22	- .38	- .38	-3.38	-.68	- .92	.120	.35
Σ	-7.89	-3.47	- .60	3.18	3.75	---	---	---	---	---
l.i	-1.32	- .58	- .10	.53	.63	---	---	---	---	---

TABLE III

Logistic Transform of Per Cent of "Correct" Responses for Change Scale

Respondent Groups	Grouped Scale Midpoints									Σ	lr.	lr*	$\xi^{(r)}$	Scale Values $\xi^{(r)1/2}$
	A	B	C	D	E	F	G	H	I					
1	- .30	.02	- .03	.73	.76	1.20	1.44	1.52	---	4.12	.69	.90	7.9	2.82
2	- .66	- .02	.20	.20	.62	.30	1.18	---	---	2.48	.41	.56	3.6	1.91
3	-1.16	- .70	- .14	.15	.55	.53	1.02	---	---	1.41	.24	.44	2.8	1.66
4	-1.10	- .64	- .30	.10	.25	.41	.51	1.23	---	.33	.06	.24	1.7	1.32
5	-1.52	- .85	- .41	- .24	.06	.16	.35	1.04	1.88	-1.28	-.21	-.04	.91	.96
6	-1.40	- .77	- .64	- .43	-.34	- .14	- .09	.09	1.92	-2.41	-.41	-.20	.63	.79
7	-1.52	-1.22	- .85	- .57	-.59	- .15	- .14	.70	1.47	-3.49	-.58	-.46	.35	.59
8	---	-1.30	- .77	-1.30	-.57	.70	- .43	.44	1.35	-5.07	-.85	-.62	.24	.49
9	---	-1.00	-1.00	-1.00	-.66	.66	-1.10	.16	.65	-5.42	-.90	-.75	.18	.42
Σ	---	-6.48	-3.94	-2.33	.08	.95	2.74	---	---	---	---	---	---	---
l.i	(.84)	- .72	- .44	- .26	.01	.11	.30	(.99)	(1.69)	---	---	---	---	---

APPENDIX D

QUESTIONS USED IN THE INTERVIEWS AND IN THE MAILED QUESTIONNAIRES

[As given below, the questions used in the study are numbered in a single series: the interview questions are numbered 1 to 5, and the questionnaire questions are numbered 6 to 76. In the interests of economy, only the text and the general form of the questions are reproduced herein.]

Interview Questions

1. I'd like to find out something about how you happened to become a teacher. What factors influenced your decision to enter the teaching profession?

2. What are your principal reasons for remaining in teaching today?

3. What are your reactions to some of the changes that have been made in the methods and materials of teaching within the last few years? (pause) Are there some things that you like or dislike about any of these?

4. What about ITV; what's your reaction to that?
   a. Did you always feel that way? Yes_____, No_____
   (If "no," determine what was responsible for this change.)

5. What would be the ideal method of introducing some such change as far as you are personally concerned?
   a. What sort of preparation should be made?

b. To what extent do you feel that the individual teacher should determine what is introduced?

c. To what extent do you feel that the individual teacher should determine how such a change or innovation was to be used in the classroom?

Questionnaire Questions

6. What is your sex? (Circle one) Male Female

7. What is your marital status? (Circle one) Married; Widowed; Divorced or separated; Single--don't expect to be married within the year; Single--expect to marry within the year.

8. If married, how many children do you have? (Circle one) None One Two Three Four Five or more

9. If married, what is the occupation of your spouse? (Enter the occupation on the line below and explain the nature of the job.)
Occupation: ______________________
Description: (What does he or she do?) ______________
Check here if retired: ______________________

10. Which of the following categories best describes the usual occupation of the head of the following households?

Your Parents' Household (Circle one)	Your Spouse's Parental Household (Circle one)	Usual Occupation of Head of Household
1	1	Professional.
2	2	Proprietor or manager.
3	3	Sales (other than sales manager or administrator).
4	4	Clerical.
5	5	Skilled worker.
6	6	Semi-skilled worker.
7	7	Service worker.
8	8	Unskilled worker.
9	9	Farmer or farm worker.
0	0	If the head of the household is a woman, also circle here.
X	X	If the head of the household is retired or deceased, also circle here.
	Y	Not married.

11. Do you find it necessary to supplement teaching income by other employment? (Circle one) Yes No

12. What is your age? (Enter age at nearest birthdate on line below.)

____

13. Please indicate your parents' (or step-parents if parents are deceased) highest educational attainment. (Circle one in each column.)

Father	Mother	Highest Educational Attainment
1	1	Eighth grade or less.
2	2	Did not graduate from high school.
3	3	High school graduate.
4	4	Part college.
5	5	Bachelor's degree.
6	6	Master's or professional degree (e.g., M.A., R.N., M.D., D.D.S., LL.B.).
7	7	Doctorate (Ph.D., Ed.D.).

14. What is your current academic status? (Circle one)
    1. I have my bachelor's degree.
    2. I have my bachelor's and master's degrees.
    3. I have my bachelor's, master's and doctoral degrees.
    4. Other (please specify) ____________________

15. Which of the following statements comes closest to describing your future educational plans? (Circle one)
    1. I do not plan to obtain another degree.
    2. I do not plan to obtain another degree, but I do intend to continue to take courses when I can.
    3. I plan to obtain a master's degree.
    4. I plan to obtain a master's and a doctoral degree.
    5. I have my master's and plan to obtain my doctoral degree.
    6. Other (please specify) ____________________

16. What was your special field while working on your most recent degree? (e.g., English, art, music, etc.) (Enter on line below.)

____

17. How long have you been an elementary school teacher in . . . .

The Present School System (Circle one)	Length of Time	Other School Systems (Circle one)
1	Less than one year	1
2	More than one year but less than 2	2
3	More than two years but less than 4	3
4	Between four and/less than six	4
5	Between six and/less than ten	5
6	Between ten and/less than fifteen	6
7	Over fifteen years	7

a. Enter total number of years you have been teaching on the line below.

b. Have you been teaching this long continuously? (Circle one) Yes No

c. If you answered "no," please explain below.

18. In what state did you obtain your first teaching certification? (Enter below)

19. What type of certification do you now hold? (Enter below)

20. When did you first definitely decide to enter teaching? (Circle one)

1. Before high school.
2. During my first two years of high school.
3. During my last two years of high school.
4. During my freshman year of college.
5. During my sophomore year of college.
6. During my junior year of college.
7. During my senior year of college.
8. Other (specify)

21. Which of the following best describes the community or communities in which you lived during your last two years of high school? (Circle one)
    1. Farm.
    2. Small town (under 25,000 population).
    3. Medium sized town (25,000 - 99,000 population).
    4. Small city (100,000 - 250,000 population).
    5. Suburb of a metropolitan area (250,000 - 500,000).
    6. Suburb of a large metropolitan area (500,000 - 2 million).
    7. Central city of a metropolitan area (250,000 - 500,000).
    8. Central city of a large metropolis (more than 2 million).

22. In what religion: (Circle one on each side)

Were You Reared?	Religion	Do You Currently Prefer?
1	Protestant	1
2	Roman Catholic	2
3	Jewish	3
4	________ Other ________ (Specify) (Specify)	4
9	None	9

23. Please rate each of the following job characteristics in terms of their importance to you, regardless of whether or not they exist in your present position. (Circle the appropriate number for each job characteristic.)

Job Characteristics	Extremely Important	Very Important	Somewhat Important	Not Important
a. A stable, secure future	1	2	3	4
b. Freedom from pressures to conform in my personal life . .	1	2	3	4
c. An opportunity to use my special aptitudes and abilities	1	2	3	4
d. An opportunity to be helpful to others	1	2	3	4

	Job Characteristics	Extremely Important	Very Important	Somewhat Important	Not Important
e.	An opportunity to be useful to society in general	1	2	3	4
f.	A chance to exercise leadership	1	2	3	4
g.	Social standing and prestige in my community	1	2	3	4
h.	Opportunity to be creative and original	1	2	3	4
i.	A chance to earn enough money to live comfortably.	1	2	3	4
j.	Opportunities to work with people	1	2	3	4
k.	A chance to achieve recognition from others in my field	1	2	3	4
l.	Freedom from supervision in my work.	1	2	3	4
m.	The absence of high pressure which takes too much out of you	1	2	3	4
n.	Opportunities for moderate but steady success rather than the chance of quick success or failure	1	2	3	4
o.	Living and working in the world of ideas	1	2	3	4

p. Which one of the above job characteristics is best provided by the elementary school teaching profession? (Enter letter of item on line.) ________________________

24. Listed below are different duties which an elementary school teacher may perform in conducting his or her class. Consider an average school day. In the first column, enter the approximate number of hours you estimate you spend for each duty. In the second column, enter the number of the description best characterizing your feelings toward each duty.

Amount of Time	Feelings
1 -- Less than one hour a day	1 -- Enjoy very much
2 -- About one hour a day	2 -- Enjoy somewhat
3 -- About two hours a day	3 -- Don't mind it
4 -- About three hours a day	4 -- Dislike somewhat
5 -- More than three hours a day	5 -- Dislike very much

	Classroom Duties	Amount of Time (Enter number)	Feelings (Enter number)
a.	Actual teaching of pupils	______	______
b.	Making lesson plans	______	______
c.	Preparing displays and bulletin boards	______	______
d.	Grading papers	______	______
e.	Handling discipline problems . . .	______	______
f.	Supervisory duties (e.g., recess, hall, bus, lunch)	______	______
g.	Helping individual children	______	______
h.	Clerical work (e.g., record keeping, collecting milk money)	______	______
	Other (please specify below):		
i.	______________________________	______	______
j.	______________________________	______	______

k. Which (if any) of the above duties do you feel should not be the responsibility of an elementary school teacher? (Indicate by circling the appropriate letters above.)

25. In addition to the duties a teacher must perform for his or her class, there are other duties that are frequently asked of teachers. Below is a list of these duties. In the first column, using the descriptions provided, enter the number most closely approximating the frequency you perform these duties. In the second column, ehter the number best characterizing your feelings toward each duty.

Frequency	Feelings
1 -- More than once a week	1 -- Enjoy very much
2 -- Once a week	2 -- Enjoy somewhat
3 -- Once every two weeks	3 -- Don't mind it
4 -- Once a month	4 -- Dislike somewhat
5 -- Once every two months	5 -- Dislike very much
6 -- Twice a year	
7 -- Once a year	

	Teachers' Duties	Frequency (Enter number)	Feelings (Enter number)
a.	Participating in PTA functions and related committees		
b.	Serving on a study committee of the local school system		
c.	Participating in committees within the school (e.g., social committee, administrative committee)		
d.	Attending faculty meetings of the school		
e.	Participating in the local professional association		
f.	Participating in a state professional association		
g.	Participating in a national professional association		
	Other (please specify below):		
h.			
i.			

j. Which, if any, of the above do you feel should not be the responsibility of an elementary school teacher? (Indicate by circling the appropriate letters above.)

26. Listed below are statements about relationships a teacher may have with professional organizations. A list of such organizations follows the statements. In the blanks to the left of each organization, enter the number of the statement best characterizing your relationship with that organization. In the blanks to the right of each organization, check (✓) whether or not you felt there was pressure placed upon you to join.

Statements

1 -- I am a member and an active participant.
2 -- I am a member and have interest in the organization, but I am not an active participant.
3 -- I am a member, but have no particular interest in the organization.
4 -- I am not a member now, but I have an interest in the organization and plan to join.
5 -- I am not a member of the organization, nor do I plan to join.

		Organizations (Enter number of statement in blank)	There is pressure to join (Check where applicable)	There is no pressure to join
a.	____	American Federation of Teachers	______	______
b.	____	Association for Childhood Education	______	______
c.	____	Department of Classroom Teachers	______	______
d.	____	Institute for Educational Advancement	______	______
e.	____	Local Education Association.	______	______
f.	____	Michigan Education Association	______	______
g.	____	National Education Association	______	______
		Other (please specify)		
h.	____	______________________	______	______
i.	____	______________________	______	______

27. Please list below the offices you have held in professional organizations.

	Organization	Office Held	Years Office Held
a.			
b.			
c.			

28. People in education are subject to many kinds of information about various aspects of their job. Below are a number of sources from which you may receive ideas about methods and techniques of instruction. Please indicate to what degree you rely on each source. (Circle one for each source.)

	Sources of Information	Use this source a great deal	Use this source somewhat	Seldom use this source	Never use this source
a.	School system newsletter . .	1	2	3	4
b.	Professional journals	1	2	3	4
c.	Suggestions furnished with texts and workbooks	1	2	3	4
d.	Suggestions given by administrative policies	1	2	3	4
e.	Faculty bulletin board . . .	1	2	3	4
f.	The principal.	1	2	3	4
g.	Long-term teachers in this school.	1	2	3	4
h.	Newer teachers in this school.	1	2	3	4
i.	Teacher committees in this school.	1	2	3	4
j.	Workshops	1	2	3	4
k.	In-service training	1	2	3	4

	Sources of Information	Use this source a great deal	Use this source somewhat	Seldom use this source	Never use this source
l.	School supply advertisements	1	2	3	4
m.	Sales representatives	1	2	3	4
n.	Non-professional magazines and newspapers	1	2	3	4
o.	My own past experience . . .	1	2	3	4
	Other (please specify below)				
p.	______________________________	1	2	3	4
q.	______________________________	1	2	3	4

29. Please rate each of the following aspects of the teaching profession in terms of its importance to you. (Circle one number for each aspect.)

	Aspects of Profession	Extremely Important	Very Important	Somewhat Important	Not Important
a.	Being viewed as an outstanding teacher by my fellow teachers	1	2	3	4
b.	Being well-liked by my fellow teachers	1	2	3	4
c.	Being viewed as an outstanding teacher by my pupils. . . .	1	2	3	4
d.	Being well-liked by my pupils	1	2	3	4
e.	Being viewed as an outstanding teacher by my principal (or supervisor, or coordinator)	1	2	3	4

	Aspects of Profession	Extremely Important	Very Important	Somewhat Important	Not Important
f.	Being viewed as an outstanding teacher by the parents of my pupils	1	2	3	4
g.	Being well-liked by the parents of my pupils	1	2	3	4

h. Which one of the lettered statements above is most important to you? (Enter letter on line below.)

____

30. By circling the appropriate number, indicate the degree to which you agree or disagree with each of the statements that follow.

Key

1 -- I strongly agree
2 -- I agree a little
3 -- I neither agree or disagree
4 -- I disagree a little
5 -- I strongly disagree

a. If I could do as I pleased, I would change the kind of work I do every few months.

1 2 3 4 5

b. I would prefer to stay with a job I know I can handle than to change to one where most things would be new to me.

1 2 3 4 5

c. I enjoy trying out new techniques and teaching devices in the classroom.

1 2 3 4 5

d. When I get used to doing things in one way, it is disturbing to have to change to a new method.

1 2 3 4 5

e. No amount of money could entice me away from teaching. Teaching offers rewards that money cannot buy.
1 2 3 4 5

f. The trouble with most jobs is that you must get used to doing things in one way, and then they want you to do them differently.
1 2 3 4 5

g. The trouble with many people is that when the find a job they can do well, they do not stick with it.
1 2 3 4 5

h. I like a job where I know that I will be doing my work about the same way from one week to the next.
1 2 3 4 5

Although you may think that each of the following pairs of alternatives are important, select the one alternative that comes closest to your own opinions and views. In some cases you may find it difficult to choose, but it is important that you do make a choice. (Circle one letter from each pair.)

For the kind of pupils in my class it is more important for the teacher to try to:

31. a. Impart sound moral and spiritual values. -- OR --
b. Increase a child's store of useful and significant knowledge.

32. a. Develop effective study skills. -- OR --
b. Develop skills in getting along effectively with others.

33. a. Develop a sense of integrity and reliability. -- OR --
b. Develop reading skills.

34. a. Develop appreciation of and respect for learning. -- OR --
b. Develop a sensitive awareness of and respect for others.

Although the following statements may not be precise descriptions of you as a teacher, circle the number of the ONE statement in each group which comes closest to describing you. In some cases you may find it difficult to choose, but it is important that you make a choice.

35. Circle the letter of the most appropriate statement:

    a. I feel a sense of responsibility for conforming as closely as possible to the decisions of the administration.
    b. I have to be careful to conduct my classroom according to the wishes of the important people around here, otherwise they can make things quite unpleasant for me.
    c. Regardless of what others may tell me, I usually know in my own mind whether or not I am teaching properly.

36. Circle the letter of the most appropriate statement:

    a. I try to do as much as I can to please the really important people around here.
    b. As a teacher I alone am able to tell whether my methods of teaching are adequate or not.
    c. I feel responsible for making sure that my methods of teaching are fairly similar to other teachers in the school.

In each of the statements below, select the most appropriate alternative that best expresses your feelings about the use of a new method or technique in teaching your class.

37. I would object most to the use of some method or technique of teaching that resulted in: (Circle one)

    a. An increased amount of attention I would be required to give to each of my pupils.
    b. A decreased amount of attention I would be required to give to each of my pupils.

38. I would object most to the use of some method or technique of teaching that: (Circle one)

    a. Placed emphasis upon knowledge or information at the expense of the development of personality or character in the child.
    b. Placed emphasis upon development of personality or character at the expense of knowledge or information.

39. I would object most to the use of some method or technique of teaching that resulted in: (Circle one)
    a. An increased amount of emotional support I would be required to give my pupils.
    b. A decreased amount of emotional support I would be required to give my pupils.

40. I would object most to the use of some method or technique of teaching that made it necessary to: (Circle one)
    a. Increase the amount of freedom given to my pupils.
    b. Decrease the amount of freedom given to my pupils.

Elementary school teachers are in an unique position with respect to evaluating and ascertaining the proper methods of dealing with children. Each teacher has his or her own view on these matters. Below is listed a series of statements dealing with teaching and the conduct of the classroom. Please indicate the degree to which you agree with these statements by circling the number of the most appropriate response, according to the following key:

Key

1 -- Completely agree
2 -- Agree
3 -- Uncertain
4 -- Disagree
5 -- Completely disagree

41. In order to avoid spending a great deal of time going over material with slower children later on, it is necessary to present a lesson correctly the first time.

1 2 3 4 5

42. There will always be a need for elementary school teachers to provide love and understanding.

1 2 3 4 5

43. The skillful teacher does not need to give much individualized help.

1 2 3 4 5

44. It has been my experience that a teacher must gear his or her behavior to the demands of the different kinds of children in the classroom; one way of doing things is usually insufficient.
1 2 3 4 5

45. Give a child an inch and he will take a mile.
1 2 3 4 5

46. For the grade level at which I am now teaching, individualized attention is the most effective teaching method -- even if it does require smaller classes.
1 2 3 4 5

47. At least for myself, tight control in the classroom is essential at all times.
1 2 3 4 5

48. As far as I am concerned, it is simply not true that individualized attention is essential at the elementary school level.
1 2 3 4 5

49. On the whole, it is undesirable to restrict children with many rules and regulations.
1 2 3 4 5

50. For my classes, it is generally the case that getting too close to the children emotionally interferes with whatever it may be that I am trying to accomplish.
1 2 3 4 5

51. Today there is entirely too much emphasis upon learning facts and in acquiring knowledge and not enough emphasis upon developing good citizenship skills.
1 2 3 4 5

52. I can usually accomplish more by remaining somewhat aloof from the children in my classes.
1 2 3 4 5

53. Whenever possible, I let the children set up their own rules and regulations.
1 2 3 4 5

54. Because time is limited, the teacher should concentrate on getting through as much material as possible even if this makes it necessary to spend less time developing desirable personal characteristics in the child.

1 2 3 4 5

55. Children will never learn responsibility if the teacher does not give them as much freedom as possible.

1 2 3 4 5

56. It is sufficient to leave growing up and maturing to parents, but getting information or some subject matter across requires the skills of a competent teacher.

1 2 3 4 5

57. From time to time, the teacher should permit children to do assignments without much supervision.

1 2 3 4 5

58. Take away the close emotional support that a teacher can provide children in elementary school and you might just as well have a machine in the classroom.

1 2 3 4 5

59. It is not far wrong to picture children as empty vessels which a teacher must fill with knowledge.

1 2 3 4 5

60. At the grade level at which I teach, it is more important for the child to grasp a given amount of knowledge rather than his social and emotional growth.

1 2 3 4 5

61. Children at the grade level at which I teach are too young to be given much freedom.

1 2 3 4 5

62. Given a choice, it would be better to spend time helping a child acquire knowledge or understanding of some lesson than in helping him to get along with other children.

1 2 3 4 5

63. The greater the freedom given to a child, the greater is the opportunity for him to live up to his potential.

1 2 3 4 5

64. I usually try to permit as great a lattitude as possible in getting things done in my classroom.
1 2 3 4 5

65. Children at my grade level have a special need for warmth and understanding.
1 2 3 4 5

66. At my grade level, it is somewhat more important for a teacher to concentrate on developing a child's character than it is to concentrate on subject matter.
1 2 3 4 5

67. You can never be certain that the way you teach a subject wouldn't have been handled better in some other way.
1 2 3 4 5

68. Of all the many teaching techniques that are available today, I think that the ones that I'm using are among the best.
1 2 3 4 5

69. One of the things that particularly appeals to me about teaching is finding and trying out new ways of creating interest and of getting material across to pupils.
1 2 3 4 5

70. It is important for the sake of good teaching to develop your own approach to instruction early in your career and then stick to it.
1 2 3 4 5

71. I'm fairly certain of how to go about getting children to learn.
1 2 3 4 5

72. In the long run, the better teachers are those who modify their approach to classroom instruction so as to make use of the newer techniques.
1 2 3 4 5

73. It's important not to let the current trends in teaching techniques sway you from the methods that have been successful in the past.
1 2 3 4 5

74. Provided it's based upon good authority, a teacher should be willing to try any new method or technique of instruction.

1 2 3 4 5

75. It doesn't really matter what teaching technique you use so long as the teacher is conscientious.

1 2 3 4 5

76. I've pretty well made up my mind with respect to the best ways of teaching children.

1 2 3 4 5

THANK YOU. WE SINCERELY APPRECIATE YOUR HELP.

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